

150 N. Patrick Boulevard, Suite 180  
Brookfield, WI 53045-5854  
Telephone (262) 879-1212  
Fax (262) 879-1220

EPA Region 5 Records Ctr.



314039

## **Health and Safety Plan**

### **Plainwell Mill Banks Emergency Action**

*Operable Unit No. 7 of the Allied Paper, Inc./  
Portage Creek/Kalamazoo River Superfund Site*

October 2007

# Table of Contents

---

1.	Introduction .....	1-1
2.	Risk Analysis.....	2-1
3.	Site Health and Safety Plan .....	3-1

## List of Appendices

Appendix A	Site Map
Appendix B	Work Zone Map
Appendix C	Emergency Route Map
Appendix D	Spill Contingency Plan
Appendix E	Air Monitoring Plan
Appendix F	RMT Project/Field Safety Audit Form
Appendix G	Daily Safety Meeting Sign-In Form

# Section 1

## Introduction

---

This Health and Safety Plan (HSP) has been developed to protect field personnel during their execution of the emergency action at the Former Plainwell Mill property Operable Unit, which is part of the Kalamazoo Superfund Site in Michigan.

This plan was prepared based on the use of current Occupational Safety and Health Administration (OSHA) and U.S. Environmental Protection Agency (USEPA) federal regulations and published guidelines. The objective of the HSP is to assure that safe working conditions exist at the site.

The HSP is divided into two sections, a Risk Analysis (Section 2) and a Site Health and Safety Plan (Section 3). The Risk Analysis was performed to analyze the specific activities that will be performed at the site during the emergency action and the chemical and physical hazards that may be encountered. From the Risk Analysis, the HSP was developed. The HSP identifies the required training, personal protective equipment (PPE), monitoring equipment, and other work procedures (site controls, decontamination, etc.) to be utilized by onsite personnel.

This HSP is a dynamic document that will be updated as conditions change. It is designed to protect RMT personnel. Subcontractors will be required to submit HSPs applicable to their prescribed activities.

## Section 2

# Risk Analysis

---



# Risk Analysis (RA)

(Required for all RMT field projects.)

## 1. General Information

Business Unit: ☒ Environmental Consulting, Construction, or Remediation

☐ SmartBurn™

Client Name: Weyerhaeuser Company

Project #: 5130.03

Task #:

Project Name: Plainwell Mill Banks Emergency Action

Project Manager: Jim Hutchens

Street Address: 200 Allegan Street

City, State, ZIP: Plainwell, MI 49080

Prepared By: Kevin Kyrias-Gann

Date: August 27, 2007

Approved By: \_\_\_\_\_ (PM)

Approved By: \_\_\_\_\_ (HSC)

Jim Hutchens

Tim Petrick

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**Proposed Date(s) of Work:** 9/15/07 through 11/15/07

### Proposed Scope of Work On Site:

To prevent, abate or minimize the release of hazardous substances from the Plainwell Mill property. Work will include excavating or containing paper residuals that are present in the floodplain and bank areas near the river along the former Plainwell Mill, the reshaping of bank in those locations, and possible construction of erosion controls to minimize bank undercutting. These bank areas are part of the Kalamazoo River Operable Unit of the Kalamazoo River Superfund Site.

### RMT Role(s) On Site:

☐ RMT Staff Will Not Be On Site (RA is for subcontractor information only)

☒ Resident Project Representative (e.g., RPR, "Observe and Document")

☒ Construction Manager (e.g., CM, Managing/General Contractor)

☐ Representative for Client (e.g., "Agent for Owner")

☒ General On-site Consulting/Engineering Services

☒ Other

☒ Soil Sampling

☐ Solid Waste Sampling

☐ Liquid Waste Sampling

☐ Groundwater Sampling

☒ Surface Water Sampling

☒ Wastewater Sampling

☒ Sediment Sampling

☐ Surveying

☐

## Risk Analysis (RA)

(Required for all RMT field projects.)

Major Project Tasks	RMT Task	Subcontractor Task	Minimum PPE Level Required see HSP for details (suggested levels for Subcontractor work)				
			<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
1. Clearing and Grubbing the work areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
2. Placing silt curtains in the river along the banks.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
3. Excavating soil/sediment/residuals from the banks and floodplain areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
4. Reworking excavated banks and placing fill/rip-rap as necessary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
5. Sampling excavation areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
6. Placing monitoring equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
7. Sampling surface water	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
8. Decontaminating trucks/equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
9. Transporting excavated soil/sediment/residuals to the dewatering pad or off-site disposal facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
10. Spotter for excavation equipment used around high voltage wires	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
11. Observe and Document	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
12. Sampling the wastewater treatment system	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> N/A	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A

## 2. Contingency Planning

This contingency plan provides the emergency information needed should there be a sudden life or property threatening situation on the site. The provisions of the contingency plan should be implemented immediately in the event of an emergency.

LOCAL EMERGENCY RESOURCES:	
Ambulance: 911	Emergency Room: 911
Police: 911	Fire Department: 911
USEPA Contact: <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Sam Chummar	Poison Control Center: 1-800-222-1222
Other (client services offered, etc.):	

## Risk Analysis (RA)

(Required for all RMT field projects.)

SITE RESOURCES:			
Drinking Water Supply	<input checked="" type="checkbox"/> RMT	<input type="checkbox"/> Subcontractor	<input type="checkbox"/> Client
Wash Water Supply	<input checked="" type="checkbox"/> RMT	<input type="checkbox"/> Subcontractor	<input type="checkbox"/> Client
Telephone – Land Line		<input type="checkbox"/> Subcontractor	<input type="checkbox"/> Client
Telephone - Cellular	<input checked="" type="checkbox"/> RMT	<input type="checkbox"/> Subcontractor	
First Aid Kit	<input checked="" type="checkbox"/> RMT	<input type="checkbox"/> Subcontractor	
Fire Extinguisher	<input checked="" type="checkbox"/> RMT	<input type="checkbox"/> Subcontractor	<input type="checkbox"/> Client
Eye Wash	<input checked="" type="checkbox"/> RMT	<input type="checkbox"/> Subcontractor	<input type="checkbox"/> Client
Other: See Emergency equipment below.	<input checked="" type="checkbox"/> RMT	<input type="checkbox"/> Subcontractor	<input type="checkbox"/> Client

EMERGENCY CONTACTS:	
RMT Technical Contact:	Nathan Weber 262/879-1212, ext. 5641 (work) 262/501-6865 (cell)
RMT Project Manager (PM):	Jim Hutchens 262/879-1212, ext. 5616 (work) 414/687-2428 (cell)
RMT Corporate Health & Safety Manager (CHSM): - Confined Space Permits - Air Monitoring Plans - Scaffolding Permits - Demolition Plan Approval	Jason Chevallard 864/234-9369 (work) 864/525-8357 (cell)
Radiation Safety Officer (RSO):	John Hanson 608/662-5238 (work) 608/220-2502 (cell - emergency only) 608/222-4588 (home - emergency only)
RMT Health & Safety Coordinator (HSC): – Excavation Permits – Hot Work Permits – Lockout/Tagout Permits – Traffic Control Plan Approval – Lighting Plan Approval	Tim Petrick 262/879-1212, ext. 5632 (work) 414/858-2414 (home) 414/840-1908 (cell)

## Risk Analysis (RA)

(Required for all RMT field projects.)

EMERGENCY CONTACTS:	
RMT Field Contact:	Jennifer Overvoorde 616/975-5415, ext. 1410 (work) 616/915-3685 (cell)
Contractor Contact:	Dave Pratt 616/975-5415 (work) 317/490-2874 (cell)
Client Contact:	Jennifer Hale 253/924-3746 (work) 253/218-5147 (cell)

### Personnel Roles and Responsibilities:

All personnel on-site are responsible for knowing the requirements of this contingency plan and responding as described below in the event of an emergency. In addition, personnel are required to follow all other provisions of the Health and Safety Plan in the event of an emergency and should be on the look out for developing emergency situations and report these situations to the site health and safety representative (HSR). Project Manager, Jim Hutchens, or his designee, will be in charge of leading all emergency response activities on site.

### Site Security and Control:

The former Plainwell Mill property is surrounded by a chain-link fence topped with three strains of barbed wire. The main entrance to the facility is at Cedar Street. The job trailer will be located near this gate where all personnel entering and exiting the facility can be monitored; the gate on Cedar Street will be closed if no personnel are stationed in the job trailer. On-site controls will be in the form of barricade tape which will be used to mark the boundaries of the exclusion zone, general work zones, and the decontamination zone.

All visitors to the site will be required to sign in at the job trailer where they will review the Health and Safety Plan and be given appropriate PPE. Visitors will be escorted at all times while on site.

### Safe Distances and Places of Refuge:

The primary refuge and rallying point on-site will be the job trailer located in the support zone (see the work zone map). In the event of an emergency in which the job trailer is not an appropriate refuge, the HSR will designate a new refuge point.

### Emergency Route:

The nearest emergency medical facility is Borgess Pipp Hospital. The hospital is a Level 1 trauma center and will be capable of handling any medical emergency encountered on site. A map showing directions from the site to Borgess Pipp Hospital is attached as Appendix C. Additionally, the route map will be posted in the job trailer on-site.

Hospital: Borgess Pipp Hospital  
411 Naomi Street  
Plainwell, MI 49080

Other:

# Risk Analysis (RA)

(Required for all RMT field projects.)

## Emergency Response:

If an emergency develops at the site, the following steps should be taken.

- The first responder/discoverer should notify the HSR and the proper emergency services for assistance (see the emergency contact information above).
- **Medical Emergency:** For minor medical incidents, a first aid kit and eye wash are provided in the decontamination areas. For a first aid or medical emergency, the injured person should be transported to Borgess Pipp Hospital-Emergency Room, 411 Naomi Street, Plainwell, MI 49080 or call 911 for an ambulance. A map of the emergency route to Borgess Pipp Hospital is provided on the next page. If necessary, employees trained by the American Red Cross in first aid and CPR can administer first aid or CPR until the EMS arrives.
- **Fire Emergency:** RMT personnel and subcontractors are not trained professional firefighters. Therefore, if there is any doubt as to whether a fire can be quickly extinguished, site personnel will immediately notify the site HSR who will contact the fire department and evacuate the site as necessary. A UL listed, Coast Guard-approved fire extinguisher will be present in the site trailer.
- **Severe Weather Emergency:** The HSR will monitor local weather reports. If there is a severe weather watch for the area, work will cease and employees will report back to the job trailer. If there is a severe weather warning for the area, employees should evacuate to the Plainwell wastewater treatment plant if working in Zones A or B, or to the mill building if working in Zones C or D. (Note: Incident reporting is not required unless an employee is hurt or property is damaged.)
- **Water Emergency:** If an employee falls into the water, do not enter the water to rescue the person. Immediately notify the HSR or nearby personnel for assistance and call 911. Deploy throwable PFDs or the life saving skiff to rescue the employee. Two employees are needed to attempt a rescue using the skiff; do not launch the skiff on your own. Once on shore, the employee should be treated for hypothermia: remove the wet clothing and keep the victim warm (using the emergency blanket in the first aid kit or the heated cab of a vehicle) until medical care arrives.
- **Spill Prevention and Containment:** A detailed spill contingency plan has been developed and is attached at the end of the Health and Safety Plan (see Appendix D).
- As soon as possible, the HSR or designee will contact the following:
  - RMT incident reporting operator to inform them of the incident
  - RMT project manager
  - USEPA/MDEQ project manager
- The HSR or designee will prepare a summary report of the incident for the client representative or oversight agency, as required.
- The HSR and PM will work with site personnel to ensure appropriate corrective actions are taken at the site prior to authorizing the continuation of work.
- The HSR and PM will review the incident response and make corrections as necessary to improve future response activities, and share any findings or changes with site personnel.

## **Risk Analysis (RA)**

(Required for all RMT field projects.)

### **Emergency Equipment:**

The following emergency equipment will be available on site:

- *First aid kit* – located in the decontamination area and the job trailer.
- *Eye wash* – located in the decontamination area and the job trailer.
- *Spill clean-up material* – see spill contingency plan for location (Appendix D).
- *Fire extinguisher* – located in the job trailer.
- *Type 4 throwable PFDs* – located upstream and downstream of the work area near the edge of the river.
- *Life saving skiff* – anchored to the banks just upstream of the work area.

### **Documentation:**

The RMT incident report operator will obtain the necessary incident information from the HSR and record the information in the RMT H&S incident database. Any additional reports or documentation regarding the incident or corrective actions should be filed in the job trailer.

### **Near Miss Reporting:**

A near-miss event is an unintentional, unsafe occurrence that could have resulted in an injury, fatality, or property damage. Only a fortunate break in the chain of events prevented an injury, fatality, or damage. Employees involved in or witness to a near miss should report the activity and any proposed solutions to the HSR. The HSR will report the near miss to the RMT incident reporting operator and RMT project manager. The HSR will inform site personnel of the corrective action and update the Health and Safety Plan.

# Risk Analysis (RA)

(Required for all RMT field projects.)

## 3. Site Classification

Identification of Potential Hazards		YES	NO	SITE TYPE <sup>(1)</sup>
1.	Is the work a Phase I ESA (i.e., supervised plant walk-through, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
2.	Is the work being performed solely by a subcontractor (i.e., RMT not on site)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
3.	Is the work just a supervised inspection for process evaluation, other inspections, meetings, records review, or a tour?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
4.*	Is the work completely absent any chemical, physical, biological, or radiological hazards which would require a site specific health and safety plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
5.	Does the work include any mandatory client H&S requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1, 2, or 3
6.	Does the project include on-site work other than office type areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2 or 3
7.	Does the proposed work scope involve any of the following:			
	Known and controlled chemical or biological hazards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2
	Unprotected work at elevation (fall protection required)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2
	Invasive activities (i.e., Phase II ESA, UST Removal, sampling, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2 or 3
	Exposure to ionizing radiation (i.e., using nuclear gauges, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2 or 3
	Open excavations/trenches (competent person may be required on site)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2 or 3
	Confined space entry (permit may be required)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2 or 3
	The use of scaffolding (qualified inspections are required)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2 or 3
	Heavy equipment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2 or 3
	Facility maintenance (O&M, piping, electrical, lockout/tagout, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2 or 3
	Underground utilities may be encountered	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2 or 3
	Overhead utilities may be encountered	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2 or 3
	Stack testing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2 or 3
	Geotechnical drilling	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2 or 3
	Demolition Activities with known or suspected contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2 or 3
	Unknown or uncontrolled chemical or biological hazards	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3
	Known and uncontrolled chemical or biological hazards	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
	Waste sampling	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
	Construction activities with known or suspected contamination	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3
	Remedial activities (RCRA, CERCLA, EnviroBlend®, Oxigent, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
8.	Is the work regulated by 29 CFR 1910.120 (OSHA) or 30 CFR (MSHA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3
9.	Is the work regulated by NPL, CERCLA, RCRA, TSD, or SARA?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3

<sup>(1)</sup> Denotes typical site level (based on activities).

## Site Type Designation:

- ☐ **Type 1** Known and controlled hazards associated with consulting/engineering services
- ☐ **Type 2** Known and controlled hazards, but with invasive, hazardous activities and/or civil/mechanical construction related services, or sampling
- ☒ **Type 3** Unknown and/or uncontrolled hazards associated with corrective action clean-up, and/or remediation of hazardous substances

## Risk Analysis (RA)

(Required for all RMT field projects.)

### 4. Site Characterization

Client Requirement(s) <sup>1</sup> :	<input type="checkbox"/> None	<input type="checkbox"/> Site Orientation	<input checked="" type="checkbox"/> H&S Orientation
	<input type="checkbox"/> Permits or Other Requirements (specify and attach, if available):		
Site Information:	<input checked="" type="checkbox"/> Map/Diagram (attach)	<input type="checkbox"/> Map/Diagram Unavailable	
	<input checked="" type="checkbox"/> Inactive Site	<input type="checkbox"/> Active Site (specify below)	
General Environmental Concerns:	<input checked="" type="checkbox"/> Contaminated Water	<input checked="" type="checkbox"/> Wastewater	<input type="checkbox"/> Dust
	<input checked="" type="checkbox"/> Contaminated Soil	<input checked="" type="checkbox"/> Solid Waste	<input type="checkbox"/> Noise
	<input type="checkbox"/> Contaminated Air	<input checked="" type="checkbox"/> Waterways	<input type="checkbox"/> Other:
Site Security/Access Control:	<input type="checkbox"/> None	<input checked="" type="checkbox"/> On Site	
	<input checked="" type="checkbox"/> Other (explain): Fencing on east, west and south sides of facility.		
Amenities Available for Work:	<input type="checkbox"/> None	<input type="checkbox"/> Waste Storage	<input checked="" type="checkbox"/> Restrooms
	<input checked="" type="checkbox"/> Tools/Equipment Storage	<input checked="" type="checkbox"/> Office/Trailer Space	<input checked="" type="checkbox"/> Supplies Storage
Utilities Available For Work:	<input type="checkbox"/> None	<input checked="" type="checkbox"/> As Listed: City water	
Medical Services Available:	<input checked="" type="checkbox"/> None On Site	<input type="checkbox"/> As Listed:	
Facility Alarms/Signals:	<input checked="" type="checkbox"/> None	<input type="checkbox"/> As Listed:	
Traffic/Parking/Railway Issues:	<input checked="" type="checkbox"/> None	<input type="checkbox"/> As Listed (On-Site/Off-Site):	
<input checked="" type="checkbox"/> Permits Required (specify) <sup>2</sup> :	<input type="checkbox"/> RMT:	<input type="checkbox"/> Local:	<input checked="" type="checkbox"/> State: NPDES
	<input checked="" type="checkbox"/> Federal: USACE	<input type="checkbox"/> Other:	<input type="checkbox"/> N/A
<input checked="" type="checkbox"/> Utility Locate Service(s):	<input checked="" type="checkbox"/> On Site	<input type="checkbox"/> Client	<input checked="" type="checkbox"/> Consumers Power approval
	<input type="checkbox"/> Off Site	<input type="checkbox"/> Diggers Hotline	<input type="checkbox"/> One Call
		<input type="checkbox"/> Julie, Inc.	<input type="checkbox"/> N/A

<sup>1</sup> If relying on the client for any specific hazard identification and control, implemented control and effectiveness should be documented prior to beginning any work activities. This is recommended for all field projects.

<sup>2</sup> Permit examples: Utilities (electrical, water, gas, etc.); Excavations; Explosives; Cranes; Burning; Fuel storage; Traffic control; Hoists; Cutting; Welding; Demolition; Confined space; Restricted access areas; etc.

**Detailed Physical Description of Site/Facility:** ☒ Map/Diagram Attached

**Site Activities/Current Operations:** ☒ None ☐ As Specified:

**Other Concurrent Site Activities, Work, and/or Other Adjacent Hazards or Concerns:**

☐ None

As Specified:

☐ Schools

☐ Daycare

☐ Hospital

☐ Airport

☒ Residential

☐ Offices

☐ Shopping

☒ On going TCRA work



## Risk Analysis (RA)

(Required for all RMT field projects.)

### "TYPE 1" Site Acknowledgment Statement (if applicable):

As an employee of RMT, Inc., I have reviewed the Risk Analysis (RA). I hereby acknowledge that I have received the RA, and that I agree that the work area is a "Type 1" site that does not require a detailed Health & Safety Plan (HSP). If during work activities there are additional hazards identified, I will communicate those to the Project Manager (PM) and the Health & Safety Coordinator (HSC), and an updated RA will be prepared.

### Signatures of RMT Site Personnel:

Not Applicable

Date:

Date:

Date:

Date:

## Risk Analysis (RA)

(Required for all RMT Type 2 or Type 3 field projects.)

### 4. Hazard Evaluation

#### Potential Chemical, Biological, or Radiological Hazards

Complete <sup>(1)</sup> Substance Name (be specific)	Specific Applicable OSHA Standard (if any)	Physical State <sup>(2)</sup> (S, L, G, Aq, Vap, F, P)	Max. <sup>(3)</sup> Conc. Level Per Physical State	Potential Routes of Exposure <sup>(4)</sup> (Inh, Ing, Abs, Con, Ext)	Warning Properties (G, P, N)	General <sup>(5)</sup> Control Measures (Eng., Admin., PPE)	IP <sup>(6)</sup> (eV)	VP <sup>(6)</sup> (mm HG)	LEL <sup>(6)</sup> (%)	UEL <sup>(6)</sup> (%)	IDLH <sup>(7)</sup>	ACGIH TLV (C, ST,TWA) <sup>(8)</sup> (R) or (T) <sup>(9)</sup>	OSHA PEL (C, ST, TWA) <sup>(8)</sup> (R) or (T) <sup>(9)</sup>
PCB Mixture	NA	S	74.0	Inh, Ing, Abs, Con	G	PPE	na	0.001	na	na	5 mg/m3	0.5 mg/m3 (skin)	0.5 mg/m3 (skin)

(1) Use OSHA regulated name, not elemental forms. If available, attach MSDS. Identify any sample preservative or O&M chemicals or subcontractor chemicals in this table also.

(2) S = Solids, L = Liquid, G = Gas, Aq = Aqueous, Vap = Vapor, F = Fume, P = Airborne Particulate

(3) If available, attach laboratory results or summary tables.

(4) Inh = Inhalation Hazard, Ing = Ingestion Hazard, Abs = Absorption Hazard, Con = Contact Hazard, Ext = External Exposure Hazard

(5) See the following sections for detailed control measures: personal protection equipment (PPE), Air Monitoring (Admin), or Site Control (Admin and Eng.).

(6) IP = Ionization Potential, VP = Vapor Pressure, LEL = Lower Explosive Limit, UEL = Upper Explosive Limit, N/A = Not Applicable, N.D. = Not Determined

(7) IDLH = Immediately Dangerous to Life and Health. NEVER enter IDLH conditions on site without proper respiratory protection.

(8) C = Ceiling Value, ST = Short-Term Exposure Limit, TWA = Time-Weighted Average, None Est. = None Established

(9) R = Respirable Limit, T = Total Limit

(10) Warning Properties: Good (G), Poor (P), None (N)

## Risk Analysis (RA)

(Required for all RMT Type 2 or Type 3 field projects.)

### 4. Hazard Evaluation (continued)

#### Site Specific Physical Hazards

HAZARD	SPECIFIC CONTROL MEASURE
Near-Water Activities	<p>The emergency response actions will be performed on the banks of the Kalamazoo River along the former Plainwell Mill property. Near-water activities include:</p> <ul style="list-style-type: none"> <li>• installation of a silt curtains,</li> <li>• clearing and grubbing the work zones,</li> <li>• Outfall investigations</li> <li>• excavating paper residuals/sediment from along the banks, and related work (i.e. confirmation sampling, silt curtain inspections, etc).</li> </ul> <p>When conducting work on or near water (i.e. if a drowning hazard exists), the following must be observed:</p> <ul style="list-style-type: none"> <li>• All employees must be wearing a USCG-approved Type 1 or 2 personal flotation device (PFD),</li> <li>• Two USCG-approved type 4 throwable PFDs with at least 90 feet of retrieval line must be stationed along the river in every work zone.</li> <li>• The buddy system must be used at all times.</li> <li>• Employees will have access to a communication device (i.e. walkie talkie, cell phone, etc).</li> </ul> <p>Additionally, if working in water employees will wear waders. Before any in water activities, the HSR will assess the condition of the river to ensure proper precautions are taken; if conditions are not safe, the activities will be modified as necessary to ensure employee safety.</p>
Overhead Utilities	<p>Overhead high voltage powerlines run along the entire length of the banks on the former plainwell mill property. These lines can not be shielded. Overhead powerlines must be considered before performing any work on the banks using heavy equipment. All heavy equipment must remain greater than 15 feet from powerlines at all times. A spotter will be used to help guide equipment under powerlines.</p>

## Risk Analysis (RA)

(Required for all RMT Type 2 or Type 3 field projects.)

### Site Specific Physical Hazards

HAZARD	SPECIFIC CONTROL MEASURE
Heavy Lifting	<p>Before lifting, plan out your route to ensure the path is clear and avoid awkward maneuvers during the lift; if lifting with another person make sure you coordinate and agree on the lifting plan. To lift, bend at your knees and keep your back straight, make sure you have a good hold on the load, tighten your stomach muscles and lift with your knees. During the lift, keep the load close to your body and your feet shoulder width apart. If an object is too heavy, or awkward in shape, make sure you have someone around who can help you lift. Additionally, a back support belt can be used to help maintain a better lifting posture.</p> <p>Lifting manhole covers may be necessary as a part of the outfall management activities. Use a manhole hook or crowbar to lift manhole covers.</p>
Vegetation	<p>Wooded areas that contain thick vegetation exist on the former Plainwell Mill property. Vegetation, such as poison ivy, poison oak, and poison sumac, can cause severe skin irritation and may be present. For protection against contact with these plants, clothing that limits skin exposure will be worn, and contact with vegetation should be avoided.</p>
Excavations	<p>Excavations will be in accordance with 1926 Subpart P. RMT will have a competent person on-site to monitor and inspect excavations. Employees will not be allowed in an excavation cavity while excavation activities are taking place. Use caution when excavating around outfall structures along the banks.</p>
Unknown hazards along the banks	<p>Potential hazards include construction debris, abandoned piping, unidentified chemicals, etc. Use extreme caution when working along the banks and follow all health and safety procedures.</p>
Outfall/sewer/manhole investigations	<p>Do not enter sewers or manholes under any circumstances. Use proper lifting techniques and equipment (as described above) when moving manhole covers. Use caution when working around open manholes. Ensure manhole covers are replaced once work is finished; do not leave manholes open and unattended. If working on or near the water, follow the requirements listed above. For smoke testing, review and follow the manufacturers operating instructions for the smoke producing device.</p>

## Risk Analysis (RA)

(Required for all RMT Type 2 or Type 3 field projects.)

### Other Common Physical Hazards

(modify as needed, but include with all project hazard assessments)

<input checked="" type="checkbox"/>	PHYSICAL HAZARD	GENERAL CONTROL MEASURE
<input checked="" type="checkbox"/>	Briars or Thistles	Be aware of any briars or thistles on site. Wear appropriate clothing and gloves. Avoid contact with briars or thistles whenever possible.
<input checked="" type="checkbox"/>	Chain Saws	Stay clear of any chain saw operations. Subcontractor is responsible for the safe use of chain saws on site.
<input checked="" type="checkbox"/>	Cold Stress	Work schedules may be modified when temperatures are below 20° F as measured by the wind chill factor. Take frequent breaks to warm up. Drink plenty of fluids. Wear appropriate clothing, and monitor for cold stress symptoms (frostbite, hypothermia, etc.).
<input checked="" type="checkbox"/>	Cutting Tools	Stay clear of contractors' cutting tools, especially saws and torches. Be aware that cutting operations could create other hazards, such as falling objects, or shifting materials, etc. Safety glasses should be worn while using cutting tools. Spark-proof tools should be used when working in areas of potential explosive or flammable conditions.
<input checked="" type="checkbox"/>	Dust/Particulates (PNOR)(Particulates Not Otherwise Regulated) (OSHA PEL = 15 mg./m <sup>3</sup> , total) (OSHA PEL = 5 mg./m <sup>3</sup> , respirable)	For general dust, work should be performed up-wind if possible. <u>If conditions warrant it</u> , monitoring should be done with a PM-10. Monitoring should occur at least 3 times per day, and every time re-entering the site. Readings should be taken downwind from the work area or inside the equipment as indicated by the conditions on site. If the OSHA PEL is exceeded, or is likely to be exceeded, engineering or administrative controls should be used, or a dust respirator must be worn. For hazardous dusts, a detailed air monitoring plan and a respiratory protection plan should be developed for the site activities.
<input checked="" type="checkbox"/>	Evening Work	If work is performed during the evening hours, work shall be limited by the availability and the quality of artificial lighting. Care should also be taken to avoid slip, trip, and fall hazards that are not as easy to identify during low light conditions.
<input checked="" type="checkbox"/>	Field Equipment	If field equipment is heavy or awkward to carry, get assistance or use carts to help move around the site.
<input checked="" type="checkbox"/>	Field Vehicle	RMT personnel shall follow all applicable state and federal traffic laws while traveling to and from the site, and while working on the site. In particular the following laws should be followed: speed limits, parking restrictions, use of wipers and lights during precipitation events, limiting cell phone use, etc.  It is the responsibility of the driver to verify that all safety equipment on the vehicle is working properly before they drive the vehicle. In particular the following items should be checked: tire pressure, tire tread, windshield wipers, windshield washer, headlights, tail lights, brake lights, spare tire, fire extinguisher, first aid kit, etc.
<input checked="" type="checkbox"/>	Flying Debris/ Eye Injuries	Be aware of any flying debris on site and wear protective eyewear when necessary.
<input checked="" type="checkbox"/>	Hand Tools	Use only the appropriate tool for the task at hand. Use the tool(s) as designed, described, and intended by the manufacturer.
<input checked="" type="checkbox"/>	Heat Stress	The work schedule may be modified if the ambient temperature is more than 80° F. Take breaks as necessary, and drink plenty of fluids. If necessary, wear sunscreen and sunglasses on bright days. Monitor site personnel for signs of heat stress symptoms (heat rash, heat cramps, heat exhaustion, or heat stroke).
<input checked="" type="checkbox"/>	Heavy Equipment.	Contractor is responsible for safe operation of equipment. All mobile heavy equipment must have a functioning backup alarm, and operators must comply with equipment manufacturer's instructions. Maintain proper distance and remain in line of sight of operator and out of reach of equipment. Isolate equipment swings, if possible. Make eye contact with the equipment operator before approaching the equipment. Understand and review hand signals, and wear orange safety vest, if necessary.

## Risk Analysis (RA)

(Required for all RMT Type 2 or Type 3 field projects.)

### Other Common Physical Hazards

(modify as needed, but include with all project hazard assessments)

<input checked="" type="checkbox"/>	PHYSICAL HAZARD	GENERAL CONTROL MEASURE
<input checked="" type="checkbox"/>	Heavy Lifting	Use proper lifting procedures and equipment when handling heavy objects such as drums, manhole covers, tank covers, etc.
<input checked="" type="checkbox"/>	Housekeeping	All field vehicles, job trailers, and field offices will be properly cleaned and organized to prevent cluttered work and storage areas.
<input checked="" type="checkbox"/>	Insects (ticks, bees, spiders, etc.)	Site workers with known allergies to insect bites should carry their own medication. In case of emergencies, inform fellow workers of any severe allergies. Use insect repellent as necessary, and as specifically allowed on site. If possible, wear long-sleeved shirts and pants. If appropriate, check for ticks at the end of each day. Have other appropriate first aid supplies handy for bites.
<input checked="" type="checkbox"/>	Irate Neighbors	Be aware of the potential for irate neighbors or outsiders that may interfere with work activities, or that may potentially damage equipment or on-site materials, etc.
<input checked="" type="checkbox"/>	Long Hours/Fatigue	Long work hours can lead to fatigue, and fatigue can lead to the physical inability to perform the work in a safe manner, or travel to, or from, a work site in a safe manner. If long work hours are scheduled, or if the scheduled work takes longer than planned, field staff should determine if fatigue is, or will be, an issue. Field staff should evaluate whether they are able to complete the work in a safe manner, or whether they are able to travel in a safe manner. If fatigue is an issue, appropriate breaks should be planned or taken, including overnight stays when necessary.
<input checked="" type="checkbox"/>	Material Handling	Move containers and heavy material only with the proper equipment, and secure them to prevent dropping, falling, or loss of control during transport. Stay clear of material handling operations, especially near slopes. Do not stand down the slope from equipment, supplies or materials being moved above on the slope, or being deployed onto the slope.
<input checked="" type="checkbox"/>	Noise	Hearing protection must be worn when noise levels exceed 85 dBA in the work area. If you need to raise your voice to be heard at the work site, then hearing protection should be worn. Hearing protection will be worn near drill rigs.
<input checked="" type="checkbox"/>	Overhead Hazards	Pay attention to overhead equipment, piping, and structures. A hard hat must be worn at all times when overhead hazards are present on site.
<input checked="" type="checkbox"/>	Poisonous Plants	Be able to identify any local poisonous plants and avoid them if possible, or wear protective clothing as necessary. When removing potentially exposed clothing or PPE, the clothing or PPE should be carefully and thoroughly washed or decontaminated.
<input checked="" type="checkbox"/>	Power Washing Equipment	Stay clear of the power washing nozzles and equipment.
<input checked="" type="checkbox"/>	Sample Preservative Chemicals:	Wear safety glasses and nitrile gloves when adding preservative chemicals to sample bottles or vials. Have clean wash water near by.
<input checked="" type="checkbox"/>	Severe Weather	Work may be suspended if dangerous weather conditions (lightening, tornadoes, high winds, heavy rain, freezing rain, etc.) occur. Be aware of changing weather conditions, and be prepared to take shelter as necessary. Potential shelters should be identified prior to beginning work.
<input checked="" type="checkbox"/>	Sharp Objects	Wear appropriate gloves when handling sharp objects, or use appropriate equipment to move objects.

# Risk Analysis (RA)

(Required for all RMT Type 2 or Type 3 field projects.)

## Other Common Physical Hazards

(modify as needed, but include with all project hazard assessments)

<input checked="" type="checkbox"/>	PHYSICAL HAZARD	GENERAL CONTROL MEASURE
<input checked="" type="checkbox"/>	Slippery Ground/Surfaces	Exercise caution, especially on slopes, field trailer floors and stairs, after a precipitation event. Use slip resistant boots, or implement surface preparations to eliminate the slippery nature of the surface prior to accessing the area. Spill control measures and general housekeeping should be utilized to help prevent slipping on wet floors, wet pavement, and general work areas.
<input checked="" type="checkbox"/>	Slips, Trips, and Falls:	Maintain clear walkways for work areas.
<input checked="" type="checkbox"/>	Steep Slopes or Banks	Pay attention to footing and walking. Stay a safe distance from unstable or extremely steep slopes. Wear appropriate footwear. Be aware of potential slope or bank failures. Heavy equipment should not be operated on or near unstable slopes or banks.
<input checked="" type="checkbox"/>	Sunburn	For extended periods of time outdoors on sunny days, sunglasses, long-sleeved shirts and long pants should be worn to help prevent sunburn and eye problems. Wear sunscreen as appropriate for the project.
<input checked="" type="checkbox"/>	Surface Water	Working next to or on, bodies of water shall be done using the buddy system. Staff shall wear USCG-approved personal floatation devices when on or adjacent to bodies of water.
<input checked="" type="checkbox"/>	Terrain	Uneven or steep terrain can cause hazardous conditions for walking and transporting equipment around the site. Site personnel should use caution when working on uneven surfaces, and they should avoid working down-slope from heavy equipment, or materials being moved or stored.
<input checked="" type="checkbox"/>	Traffic (client, contractors, public, semi-trucks, forklifts, etc.)	Obey all posted speed limits. Park in designated areas only. Be aware of traffic patterns on site, and during access to the site. Use orange traffic cones and barrier warning tape, as needed, or if within 25 feet of the right-of-way. RMT personnel must wear orange safety vests when working in or near traffic areas..
<input checked="" type="checkbox"/>	Tree Cutting	Stay clear of tree cutting activities.
<input checked="" type="checkbox"/>	Trip Hazards (wires, cords, hoses, debris, corn stubble, uneven surfaces, etc.)	Temporary wires, cords, hoses, etc., should be properly located, marked, and protected to help prevent tripping and disruption to work activities. Trip hazards are particularly a problem early in the morning, late in the day, or under other poor lighting conditions.
<input checked="" type="checkbox"/>	Uneven Surfaces	Be aware of uneven walking or driving surfaces and exercise caution when moving around the site.
<input checked="" type="checkbox"/>	Utilities – Overhead (electrical, telephone, cable TV, etc.)	A subcontractor, the client, or RMT will locate and identify all overhead utilities. The owner or client will be responsible for identifying all applicable overhead utilities, product lines, pipes, and aboveground tanks. A minimum clearance of 20 feet must be maintained between equipment and overhead utility lines.
<input checked="" type="checkbox"/>	Utilities – Underground (electric, gas, telephone, water, storm sewer, sanitary sewer, cable TV, etc.).	A subcontractor, the client, or RMT will call Digger's Hotline to locate all underground utilities. The owner or client will be responsible for marking all applicable on-site underground utilities, product lines, pipes, and tanks.

## **Section 3**

# **Site Health and Safety Plan**

---



# Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

## 1. General Information

Client Name: Weyerhaeuser Company Project #: 5130.03 Task #:  
Project Name: Plainwell Mill Banks Emergency Project Manager: Jim Hutchens  
Action  
Prepared By: Kevin Kyrias-Gann Date: August 27, 2007  
Approved By: (PM) Approved By: (HSC)  
Jim Hutchens Tim Petrick  
Date: Date:

**Proposed Date(s) of RMT Work:** 9/15/07 through 11/15/07

ON-SITE PROJECT TEAM MEMBER	ON-SITE PROJECT RESPONSIBILITIES
Kevin Kyrias-Gann or on-site designee	RMT Site Health and Safety Representative (Supervisor)
Nathan Weber	Project Engineer
John Rice	Project Hydrogeologist
NA	Project Technical Coordinator
NA	Project Scientist
Jennifer Overvoorde	Observation and Documentation
Nathan Weber or on-site designee	Soil Sampling
NA	Groundwater Sampling
Subcontractor	Surveying
Dave Pratt	Competent person for excavations

<sup>(1)</sup> Field projects will be audited for H&S compliance if they meet the requirements of the audit program.

Any required construction/demolition activities: ☒ No ☐ Yes If Yes, complete Section 2

# Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

## 2. Construction Tasks: [work tasks to be performed by RMT staff or RMT subcontractors]

### Civil

- ☐ Sewer (utility)
- ☐ Water (utility)
- ☐ Electric (utility)
- ☐ Communications (utility)
- ☐ Siding
- ☐ Roofing
- ☐ Drywall
- ☐ Flooring
- ☐ Ceilings
- ☐ Casework
- ☐ Masonry
- ☐ Escalator

- ☐ Steel (erection)
- ☐ Pre-cast (erection)
- ☐ Concrete (erection)
- ☐ Re-bar
- ☐ Elevator
- ☐ Fireproofing
- ☐ Windows
- ☐ Landscaping
- ☐ Painting
- ☐ Insulation
- ☐ Doors
- ☐ Finish Concrete

### Mechanical

- ☐ Insulation
- ☐ Millwright
- ☐ Fire Protection
- ☐ Boiler
- ☐ Industrial Ventilation
- ☐ Steel Fabrication/Erection

### Other

- ☐ Electrical
- ☐ Demolition (attach a detailed "Demolition Plan")

☒ Others

Outfall abandonment - this task is expected to consist of removing above grade features and either continued removal of below grade outfall structures or filling several feet of the outfall discharge pipe with concrete.

☐ Others

☐ Others

### Estimated Direct-Hire RMT Employees:

Home Office: ☒ Not Applicable ☐ Specify:

Craft Labor: ☒ Not Applicable ☐ Specify:

Craft

Quantity

Craft

Quantity

# Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

## 3. Applicable Safety Standards or Regulations:

☒ Federal OSHA

☐ State OSHA

☐ Owner/Client

### Specific Standards:

### 29 CFR 1910 (OSHA)

### 29 CFR 1926 (Other Regulations)

<input checked="" type="checkbox"/> Medical Services and First Aid	1910.151	1926.50
<input checked="" type="checkbox"/> Hazard Communication (HAZCOM)	1910.1200	1926.59
<input type="checkbox"/> Lead Exposure	1910.1025	1926.62
<input checked="" type="checkbox"/> HAZWOPER	1910.120	1926.65
<input checked="" type="checkbox"/> Personal Protective Equipment (PPE)	1910.132-138	1926.95-107
<input checked="" type="checkbox"/> Respiratory Protection	1910.134	1926.103
<input type="checkbox"/> Ventilation	1910.94	1926.57
<input checked="" type="checkbox"/> Noise Exposure	1910.95	1926.52
<input type="checkbox"/> Illumination	N/A	1926.56
<input type="checkbox"/> Fire Protection	1910.157	1926.24 and 150-155
<input type="checkbox"/> Sanitation	1910.141	1926.51
<input type="checkbox"/> Materials Handling (rigging, etc.)	1910.176	1926.250-251
<input type="checkbox"/> Welding/Cutting	1910.251-255	1926.350-354
<input type="checkbox"/> Lockout/Tagout	1910.147	1926.417
<input type="checkbox"/> Electrical (flexible cords, etc.)	1910.305	1926.400-449
<input type="checkbox"/> Scaffolding	1910.28-29	1926.450-454
<input type="checkbox"/> Fall Protection (elevated work)	1910.23-29, 1910.66-68	1926.104-107; 500-503
<input type="checkbox"/> Ladders/Stairways	1910.25-27	1926.1050 and 1060
<input type="checkbox"/> Cranes, Derricks, Hoists, Elevators, etc.	1910.179-181	1926.550-555
<input type="checkbox"/> Aerial Lifts	1910.66-68	1926.556
<input checked="" type="checkbox"/> Earth Moving Equipment	N/A	1926.602
<input type="checkbox"/> Powered Industrial Trucks (forklifts)	1910.178	1926.602
<input checked="" type="checkbox"/> Excavations and Trenching	N/A	1926.650-652
<input type="checkbox"/> Concrete and Masonry	N/A	1926.700-706
<input type="checkbox"/> Steel Erection	N/A	1926.750-761
<input type="checkbox"/> Demolition	N/A	1926.850-860
<input type="checkbox"/> Asbestos	1910.1001	1926.1101
<input type="checkbox"/> Confined Space Entry	1910.146	1926.21
<input type="checkbox"/> Commercial Diving	1910.401-441	1926.1071-1092

## Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

<input type="checkbox"/> Compressed Gases	1910.101-105	N/A
<input type="checkbox"/> Ionizing Radiation	1910.1096	1926.53
<input type="checkbox"/> Benzene	1910.1028	1926.1128
<input type="checkbox"/> Cadmium	1910.1027	1926.1127
<input checked="" type="checkbox"/> Tools - Hand and Power	N/A	1926.300-307
<input type="checkbox"/> Blasting and Using Explosives	N/A	1926.900-914

# Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

## 4. Training Required (\* required for all "Type 3" sites; but minimum recommended)

Check "A" if training required for everyone, and check "T" if training required for specific task.

A	T	SUBJECT	REFERENCE
			29 CFR 1910                      29 CFR 1926 or Other
<input checked="" type="checkbox"/>	<input type="checkbox"/>	HAZWOPER 40 hour*	1910.120                      1926.65
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3-Day HAZWOPER Supervised On-Site*	1910.120                      1926.65
<input checked="" type="checkbox"/>	<input type="checkbox"/>	8-Hour HAZWOPER Refresher*	1910.120                      1926.65
<input type="checkbox"/>	<input checked="" type="checkbox"/>	8-Hour Supervisor HAZWOPER*	1910.120                      1926.65
<input type="checkbox"/>	<input checked="" type="checkbox"/>	First Aid, CPR*	1910.151                      1926.23,.50
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Respiratory Protection	1910.134                      1926.103
<input type="checkbox"/>	<input type="checkbox"/>	Confined Space <input type="checkbox"/> Permit attached	1910.146                      1926.21
<input type="checkbox"/>	<input type="checkbox"/>	Mine Safety (MSHA)	N/A                              30 CFR 48.8
<input type="checkbox"/>	<input type="checkbox"/>	Lockout/Tagout <input type="checkbox"/> Permit attached	1910.147                      1926.417
<input type="checkbox"/>	<input type="checkbox"/>	Bloodborne Pathogens	1910.1030                      N/A
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Noise Exposure	1910.95                        1926.52
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Competent Person	N/A                              1926.32,.450,.650
<input type="checkbox"/>	<input type="checkbox"/>	Construction Health and Safety OSHA 10-Hour	N/A                              1926.21
<input type="checkbox"/>	<input type="checkbox"/>	Demolition	N/A                              1926.850
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Excavations <input type="checkbox"/> Permit attached	N/A                              1926.650-652
<input type="checkbox"/>	<input type="checkbox"/>	Electrical Work	1910.332                      1926.400-.449
<input type="checkbox"/>	<input type="checkbox"/>	Ladders/Stairways	N/A                              1926.1050-1060
<input type="checkbox"/>	<input type="checkbox"/>	Scaffolding	1910.28                        1926.450-454
<input type="checkbox"/>	<input type="checkbox"/>	Fall Protection	1910.23-29; 1910.66-68      1926.104,.501
<input type="checkbox"/>	<input type="checkbox"/>	Commercial Diving	1910.410                      1926.1071-1092
<input type="checkbox"/>	<input type="checkbox"/>	Hot Work <input type="checkbox"/> Permit attached	1910.251-255                      1926.350
<input type="checkbox"/>	<input type="checkbox"/>	Lead Awareness	1910.1025                      1926.62
<input type="checkbox"/>	<input type="checkbox"/>	Asbestos Awareness	1910.1001                      1926.1101
<input type="checkbox"/>	<input type="checkbox"/>	Cadmium	1910.1027                      1926.1127
<input type="checkbox"/>	<input type="checkbox"/>	Benzene	1910.1028                      1926.1128
<input type="checkbox"/>	<input type="checkbox"/>	Ionizing Radiation	1910.1096                      1926.53; 10 CFR 19.12
<input type="checkbox"/>	<input type="checkbox"/>	Troxler or NITON Gauge User	1910.1096                      10 CFR 19.12
<input type="checkbox"/>	<input type="checkbox"/>	Radiation Safety Program	1910.1096                      10 CFR 20.1101
<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hazard Communication (HAZCOM)	1910.1200                      1926.59
<input type="checkbox"/>	<input type="checkbox"/>	DOT Hazardous Materials Shipping	1910.1201                      49 CFR 172.704

Client-specific training: ☒ Not Applicable ☐ Specify

Site-specific orientation: ☐ Not Applicable ☒ Specify

Daily H&S Meetings prior to start of work

Competent person: ☐ Not Applicable ☒ Excavations

Direct-hire employee training/certification: ☒ Not Applicable ☐ Specify

# Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

## 5. Medical Surveillance

**Surveillance Required:** \* required for all "Type 3" sites; baseline is minimum recommended

\*\* Specify frequency below

	29 CFR 1910	29 CFR 1926 or Other
<input checked="" type="checkbox"/> HAZWOPER Physical - Baseline*	1910.120	1926.65
<input checked="" type="checkbox"/> HAZWOPER Physical - Annual	1910.120	1926.65
<input checked="" type="checkbox"/> HAZWOPER Physical - Biennial*	1910.120	1926.65
<input type="checkbox"/> OSHA Respiratory Protection Questionnaire	1910.134	1926.103
<input type="checkbox"/> Respiratory Certification Exam	1910.134	1926.103
<input type="checkbox"/> Arsenic (urine) **	1910.1018	N/A
<input type="checkbox"/> Asbestos **	1910.1001	1926.1101
<input type="checkbox"/> Cadmium (blood) **	1910.1027	1926.1127
<input type="checkbox"/> Lead/ZPP (blood) **	1910.1025	1926.62
<input type="checkbox"/> Mercury (blood) **	N/A	N/A
<input type="checkbox"/> PCB **	N/A	N/A
<input type="checkbox"/> Vinyl Chloride **	1910.1017	1926.117
<input type="checkbox"/> Hepatitis B Vaccine (series) **	1910.1030	N/A
<input type="checkbox"/> Tetanus/Diphtheria	N/A	Stay Current
<input type="checkbox"/> Stress Test	N/A	Only as requested
<input type="checkbox"/> Visual Acuity Test	N/A	Only as requested
<input type="checkbox"/> Hearing Test (Audiometry)	N/A	Only as requested
<input type="checkbox"/> Pulmonary Function	N/A	Only as requested

Client-specific drug testing<sup>1</sup>: ☒ Not Applicable ☐ Specify

Client-specific medical monitoring<sup>1</sup>: ☒ Not Applicable ☐ Specify

Site-specific medical monitoring: ☒ Not Applicable ☐ Specify

\*\*Frequency of medical monitoring: ☒ Not Applicable ☐ Specify

<sup>1</sup> Client required drug testing or medical monitoring should be coordinated through the CHSM.

Note: RMT has a "Drug and Substance Abuse" policy (#45). RMT may require employees or subcontractors to be tested upon reasonable suspicion, following accidents or incidents during work activities, or during travel to or from a project site. Client policies may be more strict in regard to procedures following an accident. Project managers must be aware of these and inform employees and subcontractors of any additional requirements.

## Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

### 6. Personal Protective Equipment (PPE)

Based on evaluation of potential hazards, the following levels of personal protection have been designated for the applicable work tasks:

Specific RMT Job Task or Function	Minimum Level of Protection			
RMT Site Visitors— Must be escorted	<input checked="" type="checkbox"/> D			
Placing silt curtains in the river along the banks.	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Hard hat (ANSI); Orange safety vest; USCG floatation device (i.e., vest); PDF must be class I or II, hip waders, buddy system				
Operator excavating soil/sediment/residuals from the banks and floodplain areas	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Safety shoes (ANSI); Hard hat (ANSI); Orange safety vest				
Reworking excavated banks and placing fill/rip-rap as necessary	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Safety shoes (ANSI); Hard hat (ANSI) Other: PFD will be worn as required by HSR; Abrasion resistant; Orange safety vest				
Sampling excavation areas	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Safety shoes (ANSI); Hard hat (ANSI) Other: PFD will be worn as required by HSR; Nitrile gloves; Orange safety vest				
Placing monitoring equipment	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Safety shoes (ANSI); Hard hat (ANSI) Other: PFD must be Class I or II; USCG floatation device (i.e., vest); waders				
Sampling surface water	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Safety shoes (ANSI); Nitrile gloves; Orange safety vest; USCG floatation device (i.e., vest); PFD must be Class I or II				
Decontaminating trucks/equipment	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Safety shoes (ANSI); Hard hat (ANSI) Other: Monitor personnel wearing tyvek suits during hot weather; Full-face shield; Nitrile gloves; Tyvek® or equivalent suit				
Spotter for excavation equipment used around high voltage wires	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Safety shoes (ANSI); Hard hat (ANSI); Orange safety vest				
Observe and Document excavation activities	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Safety shoes (ANSI); Hard hat (ANSI); Orange safety vest				
Sampling wastewater treatment system	<input checked="" type="checkbox"/> D	<input type="checkbox"/> C	<input type="checkbox"/> B	<input type="checkbox"/> A
Level D: Safety glasses (ANSI); Safety shoes (ANSI); Hard hat (ANSI); Nitrile gloves; Orange safety vest				

## Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

Criteria for changing protection levels are as follows:

EVACUATION <sup>(2)</sup> or PROTECTION LEVEL CHANGE <sup>(3)</sup> CRITERIA	APPROVALS REQUIRED <sup>(1)</sup>		
	HSR	HSC	CHSM
Site Evacuation Plan: <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Specify or Attach Plan: See the emergency action plan in Section 2 of the Risk Analysis (RA).			
Change to Level D when: <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Specify	<input type="checkbox"/>		
Change to Level C when: <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> See air monitoring plan (Appendix E)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change to Level B when: <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change to Level A when: <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>(1)</sup> HSR: Health & Safety Supervisor On Site

HSC: Health & Safety Coordinator

CHSM: Corporate Health & Safety Manager

<sup>(2)</sup> General Recommendations: Evacuate the area when LEL readings are >10% LEL in the atmosphere, or when PID readings are greater than the PEL in the breathing zone.

<sup>(3)</sup> General Recommendation: To Level C when PID readings are greater than the PEL in the breathing zone. To Level B or A only after detailed evaluation and planning.

**Note:** Changes to the level of protection shall be made only after the required approvals are obtained. All changes shall be recorded in the field log and reported to the Project Manager as soon as possible. RMT's H&S goal is to avoid using respiratory protection unless it is absolutely necessary or required. Administrative controls or engineering controls should always be considered as a means to reduce potential exposures, before PPE is required or considered.



## Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

### 7. Air Monitoring<sup>(1)</sup>

The following monitoring instruments shall be used on site to measure airborne contaminant concentrations in Either the breathing zone, or as part of the overall site **Air Monitoring Plan** (attach detailed plan):

MONITORING EQUIPMENT	LOCATION OF MONITORING	FREQUENCY OF MONITORING	ACTION LEVELS
<input type="checkbox"/> Combustible Gas Indicator	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Monitoring Plan Attached <input type="checkbox"/> Confined Space <input type="checkbox"/> Specify	<input type="checkbox"/> Continuously when potential combustible gases or lack of oxygen are suspected. <input type="checkbox"/> Specify	5-10% LEL: continue with caution > 10 % LEL: evacuate the area <input type="checkbox"/> Specify
<input type="checkbox"/> O2 Monitor <input type="checkbox"/> CO Monitor <input type="checkbox"/> H2S Monitor	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Confined Space <input type="checkbox"/> Specify	<input type="checkbox"/> Continuously when excess oxygen (>22.5%) or lack of oxygen (<19.5%) are suspected. <input type="checkbox"/> Specify	< 19.5% Oxygen: evacuate the area; supplied air may be needed > 22.5% Oxygen: evacuate the area; potential fire hazard <input type="checkbox"/> Specify
<input type="checkbox"/> Colorimetric Tubes  Type:  Type:  Type:	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Specify <input type="checkbox"/> Sample Container  <input type="checkbox"/> Confined Space <input type="checkbox"/> Specify	<input type="checkbox"/> Periodically during sampling for analytical purposes only <input type="checkbox"/> Whenever noticeable odor is present <input type="checkbox"/> Specify	<input type="checkbox"/> Specify
<input type="checkbox"/> PID  Lamp Needed: <input type="checkbox"/> 9.8 eV <input type="checkbox"/> 10.6 eV <input type="checkbox"/> 11.7 eV  Calibration Gas: Isobutylene  Correction Factor:	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Sample Container <input type="checkbox"/> Confined Space <input type="checkbox"/> Specify	<input type="checkbox"/> Periodically during sampling for analytical purposes only <input type="checkbox"/> Specify  <input type="checkbox"/> Specify	<input type="checkbox"/> Specify
<input type="checkbox"/> FID	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Specify	<input type="checkbox"/> Specify	<input type="checkbox"/> Specify
<input checked="" type="checkbox"/> Mini-RAM	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> See Air monitoring plan, Appendix E	<input checked="" type="checkbox"/> During periods of sustained visible airborne particulate matter. See Appendix E	<input checked="" type="checkbox"/> The action level will be 7.5 mg/m3 total dust. See Appendix E.
<input type="checkbox"/> Other:	<input type="checkbox"/> Specify	<input type="checkbox"/> Specify	<input type="checkbox"/> Specify
<input type="checkbox"/> Laboratory Supported  <input type="checkbox"/> Personal <input type="checkbox"/> Area <input type="checkbox"/> Perimeter	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Specify	<input type="checkbox"/> Specify	<input type="checkbox"/> Specify

<sup>(1)</sup> Whenever air monitoring is required to be performed, a detailed **Air-Monitoring Plan** should be developed and attached to the HSP. The plan should include **Monitoring Locations**, **Frequency of Readings**, and any **Action Levels** being used to control the work site.

## Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

### 8. Site Controls and Work Zones (describe in detail)

Facility Alarms or Signals: ☒ Not Applicable ☐ Specify

Work Permits Required: ☒ Not Applicable ☐ Specify

Work Traffic Issues: ☒ Not Applicable ☐ Specify

Parking Issues: ☒ Not Applicable ☐ Specify

Railway Traffic Issues: ☒ Not Applicable ☐ Specify

#### Support Zone(s):

☐ RMT field vehicle ☒ Job Trailer On Site ☒ Other: (the exact location of the work zones is subject to change based on conditions encountered in the field)

#### Contamination Reduction Zone(s):

☐ Field vehicle ☐ Facility restroom/utility room ☒ Other: Section of the dewatering/staging pad. See Appendix B (the exact location is subject to change based on conditions encountered in the field).

#### Exclusion Zone(s):

☒ Area immediately surrounding work area ☒ Other: See Appendix B. Exclusion zones will be marked with caution tape or temporary fencing in the field (the exact location is subject to change based on conditions encountered in the field).

#### Site Entry Procedures:

- ☒ Notify Site H&S Representative.
- ☒ Read H&S Plan and sign Acknowledgment Statement
- ☐ Check in with the facility contact person ☐ Specify
- ☐ Check in with facility security guard. ☐ Specify
- ☒ Wear proper personal protective equipment.
- ☐ Attend facility orientation ☐ Specify
- ☒ Conduct daily safety meeting (document).
- ☐ Other: ☐ Specify

# Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

## Decontamination Procedures:

**Personnel:** Any working in or entering the exclusion zone

For work performed in Level D or Modified Level D, where minimal contamination is expected, follow standard decontamination procedures, and good personal hygiene. Disposable PPE should be removed, contained, and disposed in an appropriate manner. Wash water and soap will be available at the site in the contamination reduction zone (see work zone map). Site workers should wash hands and any exposed skin extremely well with soap and water, prior to leaving the contamination reduction zone, eating, drinking, driving, or leaving the site. Any soiled or contaminated clothing should be removed and handled appropriately. Loose material should be removed with brushes available in the contamination reduction zone. Highly soiled clothing should be removed and washed with the power washer or if necessary contained and disposed in an appropriate manner. Soiled or contaminated clothing should be carefully bagged prior to disposal or washing, to reduce potential exposure.

**Equipment:** Any equipment used in the exclusion zone

Site workers should plan and stage for the appropriate decontamination method at the site, prior to beginning the work. The decontamination area will be located on the residuals containment pad. Any contaminated single-use disposable equipment or PPE should be appropriately containerized and disposed as soon as possible in an appropriate manner. Contaminated equipment or PPE that will be re-used should be handled and cleaned while wearing the appropriate PPE. Hand-held equipment should be decontaminated using a brush, soap and water. Trucks and heavy equipment should be decontaminated using the pressure washer. Only employees wearing the proper PPE (as described in section 6 above) should use the pressure washer. Water generated during decontamination will be contained on the containment pad and drained to a sump where the water will be pumped to the water treatment system.

## Disposal of Investigation-derived Material:

- ☐ Leave on site for disposal. ☒ Other: NA

## Work Limitations (time of day, buddy system, etc.):

- ☒ Buddy system required for some tasks All work in the exclusion zone and along the banks of the river.  
☒ Work will be performed during daylight hours only  
☐ Work will be performed using artificial light.

Describe or attach a lighting plan:

- ☒ No eating, drinking, or smoking in contamination reduction zone(s) or exclusion zone(s)  
☒ When temperatures are either above 80°F or below 20°F, work schedules may be modified  
☐ Other site-specific limitations:

# Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

## Radiation Safety:

- ☒ Radiation information is not applicable to this project.
- ☐ Notify RSO.
- ☐ Wear dosimeter badge when handling gauge.
- ☐ Post applicable radiation signs and documents.
- ☐ Post emergency numbers.
- ☐ Provide at least two lock systems for overnight storage.
- ☐ Maintain storage at least 15 feet from full-time workstations.
- ☐ Block, brace, and securely lock the gauge during "all" transportation.
- ☐ Limit "public" exposure to gauge while in use.
- ☐ Provide sketch of gauge storage to RSO.

# Site Health & Safety Plan

(Required for all RMT Type 2 or Type 3 field projects.)

## Acknowledgment Statement:

As an employee of RMT, Inc., I have reviewed the Hazard Assessment (HA)/Health & Safety Plan (HSP). I hereby acknowledge that I have received the **required level of training and medical surveillance**, that I am knowledgeable about the contents of this site-specific RA/HSP, and that I will use personal protective equipment (PPE) and follow procedures specified in the HSP.

## Signatures of RMT Site Personnel:

_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____

## Health and Safety Field Audit Documentation:

If this project has been selected as a field audit candidate, the auditor will review a copy of this RA/HSP and make comments, edits, additions, or deletions on the copy. The audit copy of this document will then be forwarded to the office HSC for review. After review, the HSC will then forward the copy to the Project Manager for review and filing.

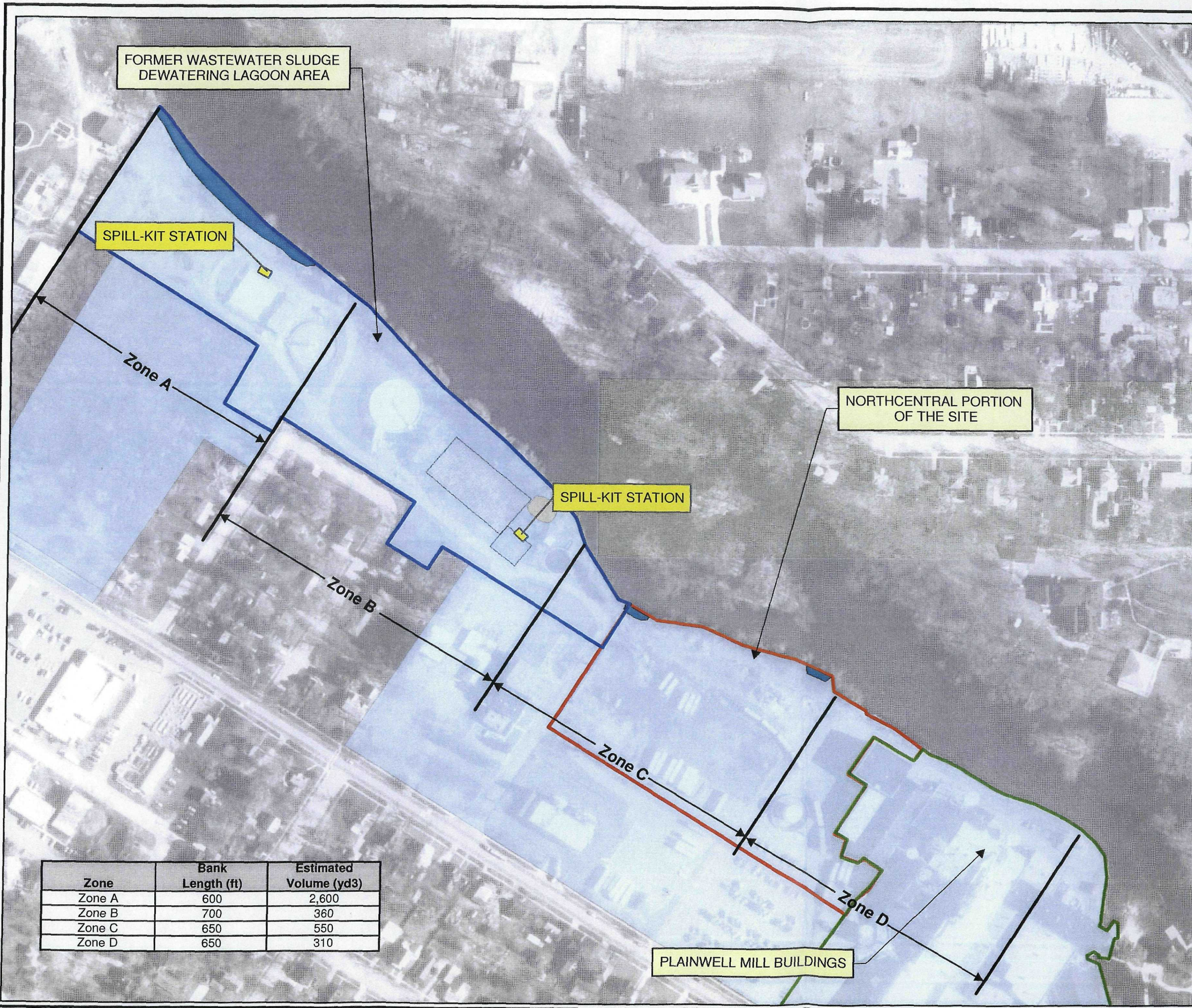
_____	(auditor)	Date: _____
-------	-----------	-------------

# Appendix A

## Site Map

---





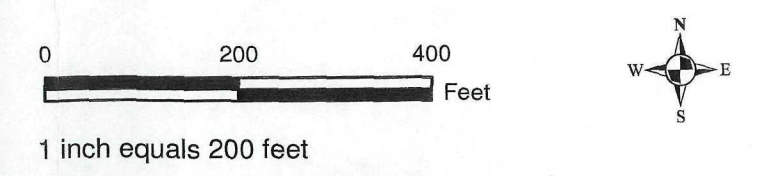
Zone	Bank Length (ft)	Estimated Volume (yd3)
Zone A	600	2,600
Zone B	700	360
Zone C	650	550
Zone D	650	310

# LEGEND

- FORMER DEWATERING LAGOON AREA
- NORTHCENTRAL PORTION OF THE SITE
- PLAINWELL MILL BUILDINGS AREA
- PROPERTY LIMITS
- FLOODPLAIN AREAS
- SEDIMENT AND WATER TREATMENT AREAS**
  - EXCESS MATERIAL STOCKPILE
  - SEDIMENT DEWATERING AREA
  - WASTE WATER TREATMENT AREA

## NOTES

1. Due to the work moving along the bank the Spill-Kit Station locations noted on the figure are approximate and field staff will notify the Response Coordinator of any changes to this layout.



PROJECT: WEYERHAEUSER COMPANY KALAMAZOO RIVER SUPERFUND SITE			
SHEET TITLE: PLAINWELL MILL PROPERTY AND RIVERBANK EARTHWORK AREA LIMITS			
DRAWN BY: PYLKASE	SCALE: AS NOTED	PROJ. NO.: 00-05130.03	
CHECKED BY:		FILE NO.: 51300305	
APPROVED BY:	DATE PRINTED: 10/8/2007	<b>FIGURE 1</b>	
DATE: OCTOBER 2007			
<b>RMT</b>		150 N. Patrick Blvd., Suite 180 Brookfield, WI 53005-5854 Phone: 262-879-1212 Fax: 262-879-1220	



# Appendix B

## Work Zone Map

---



Levels  
(1) 1-5.7 21.23 20.42  
(2) 1-5.7 21.23 20.42  
(3) 1-5.7 21.23 20.42  
(4) 1-5.7 21.23 20.42

Logical Names  
(1) bmc  
(2) bmc  
(3) bmc  
(4) bmc

Reference Files  
Ref File 1 - J:\05130\_02\mill\miller\05130\_02.dgn  
Ref File 2 - J:\05130\_02\mill\miller\05130\_02.dgn  
Ref File 3 - J:\05130\_02\mill\miller\05130\_02.dgn  
Ref File 4 - J:\05130\_02\mill\miller\05130\_02.dgn

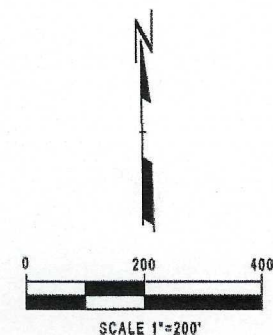
Plot Data  
Design File J:\05130\_02\miller\miller\05130\_02.dgn  
Plot Date Thu Aug 30 09:09:15 2007  
Plot Time 09:09:15  
Pen Table - J:\CADD\12\IBL\MSVAD\haut\2000\_PDF.tbl  
Levels On 1-6.3



# LEGEND

--- APPROXIMATE EXTENT OF EMERGENCY ACTION  
(SEE FIGURES 4-7 FOR ZONE DETAILS)

- Exclusion Zone
- Contamination Reduction Zone
- Work Zone/ Truck Route
- Support Zone/Trailer
- Visitors Zone



PROJECT: WEYERHAEUSER PLAINWELL MILL BANKS  
EMERGENCY RESPONSE PLAN DESIGN REPORT  
PLAINWELL, MI

SHEET TITLE:

PROJECT SITE PLAN

DRAWN BY: Tiebert	SCALE: 1"=200'	PROJ. NO. 5130.02
CHECKED BY:	DATE PRINTED:	FILE NO. siteplan.plt
APPROVED BY:		FIGURE 3
DATE: AUGUST 2007		

**RMT**

744 Heartland Trail  
Madison, WI 53717-1934  
P.O. Box 8023 53706-8023  
Phone: 608-831-4444  
Fax: 608-831-3334

# Appendix C

## Emergency Route Map

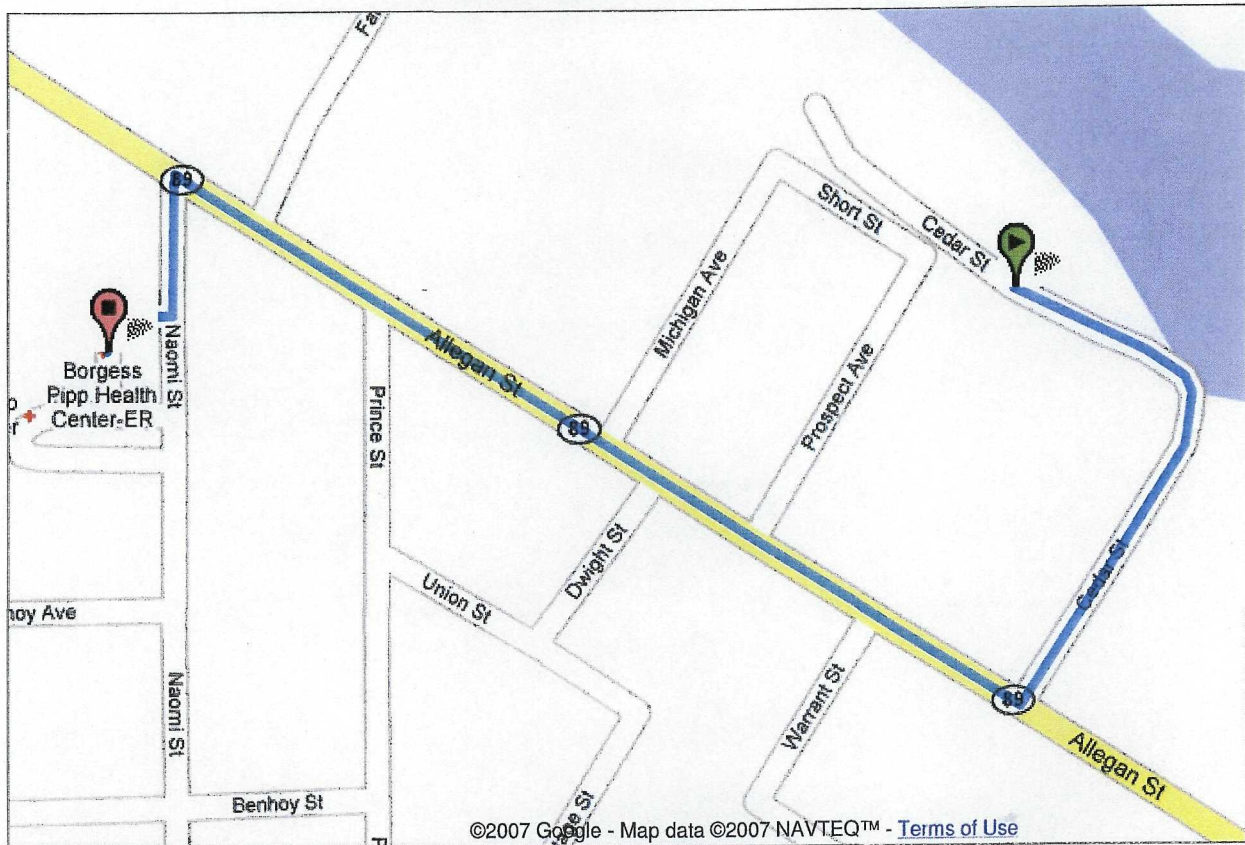
---





Start **Cedar St**  
**Plainwell, MI 49080**  
End **Borgess Pipp Health Center-ER**  
**Plainwell, MI**

Travel **0.5 mi – about 2 mins**



**Cedar St**  
**Plainwell, MI 49080**

Drive: 0.5 mi – about 2 mins

1. Head **southeast** on **Cedar St** toward **Allegan St/M-89** 0.2 mi
- ➔ 2. Turn **right** at **Allegan St/M-89** 0.3 mi  
1 min
- ⬅ 3. Turn **left** at **Naomi St** 220 ft
- ➔ 4. Turn **right** 151 ft



**Borgess Pipp Health Center-ER**  
**Plainwell, MI**

These directions are for planning purposes only. You may find that construction projects, traffic, or other events may cause road conditions to differ from the map results.

Map data ©2007 NAVTEQ™

# Appendix D

## Spill Contingency Plan

---

150 N. Patrick Boulevard, Suite 180  
Brookfield, WI 53045-5854  
Telephone (262) 879-1212  
Fax (262) 879-1220

# **Oil Spill Contingency Plan**

## **Weyerhaeuser Company**

### *Plainwell Mill*

October 2007

# Table of Contents

---

1.	Introduction .....	1
1.1	Purpose and Scope .....	1
1.2	Resources at Risk .....	1
1.3	Risk Assessment .....	2
1.4	Response Strategy .....	3
2.	Spill Discovery and Response .....	4
2.1	Distribution of Responsibilities.....	4
2.2	Response Activities.....	5
2.2.1	Discharge Discovery and Source Control .....	5
2.2.2	Assessment and Notifications .....	5
2.2.3	Control and Recovery .....	6
2.2.4	Disposal of Recovered Product and Contaminated Response Material.....	7
2.2.5	Termination.....	7
2.3	Discharge Notification .....	8
3.	Response Resources and Preparedness Activities .....	9
3.1	Equipment, Supplies, Services, and Manpower.....	9
3.2	Access to Receiving Waterbody .....	9
3.3	Communications and Control .....	10
3.4	Updating Procedures .....	10
3.5	Reporting Requirements .....	10

## List of Attachments

Attachment 1	Emergency Contacts
Attachment 2	Discharge Notification Procedures
Attachment 3	Figure

# Section 1

## Introduction

---

### 1.1 Purpose and Scope

This Oil Spill Contingency Plan is prepared in accordance with 40 CFR 112.7(d) to address areas of the operations that may potentially cause a release where secondary containment is impracticable or prevent a release from an undocumented source during excavation activities.

The purpose of this Oil Spill Contingency Plan ("Contingency Plan") is to define procedures and tactics for responding to discharges of oil into navigable waters or adjoining shorelines of the United States, originating more specifically from land based sources in association with the Plainwell Mill bank excavation activities. The Contingency Plan is implemented whenever a discharge of oil has reached or threatens navigable waters or adjoining shorelines.

The objective of procedures described in this Contingency Plan is to protect the public, RMT, Inc. (RMT) personnel and subcontractors, and other responders during oil discharges. In addition, the Contingency Plan is intended to minimize damage to the environment, natural resources, and the Plainwell Mill property from a discharge of oil. This Contingency Plan addresses areas of the facility that have inadequate secondary containment and where impacts may result from a discharge in these areas. Areas where a potential release could occur include undocumented materials buried within the excavation area and hydraulic or gas leaks associated with heavy equipment working near the adjacent waterway.

This Contingency Plan follows the content and organization of 40 CFR Part 109 and describes the distribution of responsibilities and basic procedures for responding to an oil discharge and performing cleanup operations.

### 1.2 Resources at Risk

The Plainwell Mill is centrally located within Plainwell, Michigan, adjacent to the Kalamazoo River and Plainwell Mill Race. The site layout diagram for the excavation is included in Attachment 3 (Figure 1) and indicates the location of the potential spill sources. Ground cover at the facility consists of pavement, soil, gravel, and low lying vegetation depending upon the specific location. The topography includes steep slopes along the Kalamazoo River near the west side of the facility becoming less steep towards the east. A number of storm sewers exist on top of the bank that drain to the Kalamazoo River. Areas most at risk for a release to surface waters include construction areas where working along the floodplains and banks is necessary and secondary containment is not practical.

The Kalamazoo River is not used in the immediate area as a public drinking water supply, but it does flow into Lake Michigan which a number of cities depend on for drinking water. In the immediate vicinity and downstream from the Plainwell Mill, the waterway provides habitat for a number of aquatic species and mammals and is used by local residents for recreational purposes. Recreational uses on the Kalamazoo River include canoeing, kayaking, and fishing.

A number of residences are located in the immediate vicinity of the facility along Short Street, Cedar Street, Michigan Avenue, and Prospect Avenue. Residences are expected to be connected to the city well system.

RMT will coordinate with the Plainwell fire and/or police departments and with nearby residential neighbors to provide the appropriate warnings in the unlikely event of a discharge that could affect public health and safety.

### **1.3 Risk Assessment**

The following equipment could potentially release oil from the site:

- a double walled 500-gallon diesel fuel tank;
- unknown materials or containers present along the banks; and
- construction equipment (*e.g.*, hydraulic fluid).

The risk of release from the fuel storage tank is low because it has double wall secondary containment. The worst-case discharge from the fuel storage tank would be an instantaneous release of 500 gallons of diesel fuel. Such a release is highly unlikely and would be the result of an extreme structural failure of the tank caused by a vehicle collision or similar accident. To prevent such a release, the tank will be located away from main vehicle routes in an area where a release to surface waters is not possible.

The presence of oil-filled containers or oily materials along or buried in the Plainwell Mill property banks is not expected based upon past on site investigations, but cannot be ruled out as possible due the quantity of historic fill present at the facility. The worst case scenario would be a release from an oil-filled container during excavation work along the banks. A release of this type would have a high risk of reaching the Kalamazoo River. The spill will be partially contained in the silt curtains, but will require response with appropriate spill countermeasures to fully contain.

The worst case oil discharge from the construction equipment will be a small quantity of oil or hydraulic fluid. Despite the small quantity, the greatest risk for release is from the construction equipment because it is impractical to provide secondary containment around operating construction equipment. Furthermore, a release would have the greatest chance of reaching the Kalamazoo River because the construction equipment will be located along the top of the bank. A release from the construction



equipment will be partially contained within the silt curtains, but will require response with appropriate spill countermeasures to fully contain.

## **1.4 Response Strategy**

RMT personnel are equipped and trained to respond to certain “minor discharges” confined within the facility. Minor discharges can generally be described as those where the quantity of product discharged is small, the discharged material can be easily stopped and controlled, the discharge is localized, and the product is not likely to seep into groundwater or reach surface water or adjoining shorelines. Procedures for responding to these minor discharges are covered below. For all other discharge incidents, including those that affect navigable waters or those that cannot be safely controlled and confined on site by facility personnel, RMT may seek the assistance of outside contractors or other responders to prevent imminent impact to navigable waters.

## Section 2

# Spill Discovery and Response

---

### 2.1 Distribution of Responsibilities

RMT has the primary responsibility for providing the initial response to oil discharge incidents originating during construction operations on the Plainwell Mill banks. To accomplish this, RMT has designated the Project Manager, Jim Hutchens, as the qualified oil discharge Response Coordinator (RC) in the event of an oil discharge.

The RC has the authority to commit the necessary services and equipment to respond to the discharge and to request assistance from Plainwell Fire and/or Police Departments, contractors, or other responders, as appropriate. The RC will direct notifications and initial response actions in accordance with personnel training and capabilities. In the event of a fire or emergency situation that threatens the health and safety of those present at the site, the RC will direct evacuations and contact the fire and police departments.

In the event of an emergency involving outside response agencies, the RC's primary responsibility is to provide information regarding the characteristics of the materials and equipment involved and to provide access to RMT resources as requested. The RC shall also take necessary measures to control the flow of people, emergency equipment, and supplies and obtain the support of the Plainwell Police Department as needed to maintain control of the site. These controls may be necessary to minimize injuries and confusion.

Finally, the RC serves as the coordinator for radio communications. The RC will acquire all essential information and ensure it is clearly communicated to emergency response personnel. The RC has access to reference material at the field office either as printed material or on computer files that can further assist the response activities.

Whenever circumstances permit, the RC transmits assessments and recommendations to RMT's Senior Management for direction. Senior Management is contacted in the following order: 1) Client Service Manager; and 2) Client Project Manager.

In the event that the RC is not available, the responsibility and authority for initiating a response to a discharge rests with the most senior RMT employee (*e.g.*, Construction Superintendent) on site at the time the discharge is discovered.

## 2.2 Response Activities

In the event of a discharge, the first priority is to stop the product flow and to shut off all ignition sources, followed by the containment, control, and mitigation of the discharge. Specific response actions are described in greater detail in the checklists below.

### 2.2.1 Discharge Discovery and Source Control

**Minor Discharge** - A minor discharge (*i.e.*, small volume leak from construction equipment) will be discovered and addressed by RMT construction personnel or by contractor personnel during scheduled inspection activities and observation of proper equipment operation.

**Major Discharge** - Due to limited quantities of chemicals on site, a major discharge is unlikely. In the event of a more severe or sudden discharge, all excavation operations will stop immediately, the discharge will be addressed and appropriate regulatory contacts will be notified according to Attachment 2.

Notifications to the National Response Center, Louisiana authorities, and St. Anthony's Parish Emergency Committee must occur immediately upon discovery of reportable discharges.

Completed Actions
Immediately report the discharge to the RC, providing the following information:
<ul style="list-style-type: none"><li>■ Exact location</li><li>■ Material involved</li><li>■ Quantity involved</li><li>■ Topographic and environmental conditions</li><li>■ Circumstances that may hinder response</li><li>■ Injuries, if any</li></ul>
Turn off all ignition sources.

### 2.2.2 Assessment and Notifications

Completed Actions
Investigate the discharge to assess the actual or potential threat to human health or the environment:
<ul style="list-style-type: none"><li>■ Location of the discharge relative to receiving water bodies</li><li>■ Quantity of spilled material</li><li>■ Ambient conditions (temperature, rain)</li></ul>

<ul style="list-style-type: none"> <li>■ Other contributing factors such as fire or explosion hazards</li> <li>■ Sensitive receptors downstream</li> </ul>
Request outside assistance from local emergency responders, as needed.
Evaluate the need to evacuate facility and evacuate employees, as needed.
Notify the fire/police departments to assess whether community evacuation is needed.
Notify immediately: <ul style="list-style-type: none"> <li>■ USEPA Onsite Coordinator and MDEQ</li> <li>■ National Response Center</li> <li>■ Response contractor(s), as needed</li> <li>■ State authorities</li> </ul>
Depending upon spill location, communicate with neighboring property owners regarding the discharge and actions taken to mitigate the damage.
If the oil reaches (or threatens to reach) the Kalamazoo River, notify the local fire/police departments to limit access to the river by local residents until the oil has been contained and recovered. Additionally, work with local police and fire departments to notify downstream water users of the spill and implement actions that will be taken to protect these downstream receptors.

### 2.2.3 Control and Recovery

The RC directs the initial control of the spill by RMT and other contractor personnel. The actions taken will depend on whether the spill has reached water or is still on land. All effort will be made to prevent the spill from reaching water.

If the oil has not yet reached water:

Completed Actions
Deploy sand bags and absorbent socks downgradient from the spill, or erect temporary barriers such as trenches, mounds or adsorbent material to prevent the spill from flowing into the Kalamazoo River.

If the oil has reached water:

Completed Actions
Contact cleanup contractor(s) if the oil spill is a non-environmental oil or fluid (not vegetable based).
Deploy floating booms immediately downstream from the release point.

Completed Actions
Control oil flow on the ground by placing absorbent socks and other sorbent material or physical barriers (e.g., "kitty litter," sandbags, earthen berm, trenches) across the spill path.
Deploy protective booming measures for downstream receptors that may be impacted by the spill.

#### 2.2.4 Disposal of Recovered Product and Contaminated Response Material

The RC ensures that all contaminated materials classified as hazardous waste are disposed of in accordance with all applicable solid and hazardous waste regulations.

Completed Actions
Place any recovered product that can be recycled into a 55-gallon drum to be separated and recycled.
Dispose of recovered product not suitable for on-site recycling with the rest of the waste collected during the response efforts.
Collect all debris in properly labeled waste containers (impervious bags, drums, or buckets).
Dispose of contaminated material in accordance with all applicable solid and hazardous waste regulations using a licensed waste hauler and disposal facility, after appropriately characterizing the material for collection and disposal.
Dispose of all contaminated response material within 2 weeks of the discharge.

#### 2.2.5 Termination

The RC ensures that cleanup has been completed and that the contaminated area has been treated or mitigated according to the applicable regulations and state/federal cleanup action levels. The RC collaborates with the local, state, and federal authorities regarding the assessment of damages.

Completed Actions
Ensure that all repairs to the defective equipment have been completed.
Review circumstances that led to the discharge and take all necessary precautions to prevent a recurrence.
Evaluate the effectiveness of the response activities and make adjustments as necessary to response procedures and personnel training.

Completed Actions
Carry out personnel and contractor debriefings as necessary to emphasize prevention measures or to communicate changes in operations or response procedures.
Submit any required follow-up reports to the authorities. In the case where the discharge (as defined in 40 CFR 112.1(b)) was greater than 1,000 gallons or was the second discharge (as defined in 40 CFR 112.1(b)) of 42 gallons or more within any 12-month period, the RC is responsible for submitting the required information within 60 days to the USEPA Regional Administrator following the required procedures. Within 30 days of the discharge, the RC will convene an incident critique including all appropriate persons that responded to the spill. The goal of the incident critique is to discuss lessons learned, the efficacy of the Contingency Plan and its implementation, and coordination of the plan/RC and other state and local plans. Within 60 days of the critique, the Contingency Plan will be updated (as needed) to incorporate the results, findings, and suggestions developed during the critique.

## 2.3 Discharge Notification

Instructions and phone numbers for reporting a discharge to the National Response Center and other federal, state, and local authorities are provided in Attachment 2 to this Contingency Plan. Any discharge to water must be reported immediately to the National Response Center. The Response Coordinator must ensure that details of the discharge are recorded on the Discharge Notification Form provided in Attachment 2.

If the discharge qualifies under 40 CFR part 112 (see Attachment 2 for conditions), the RC is responsible for ensuring that all pertinent information is provided to the USEPA Regional Administrator.

## **Section 3**

# **Response Resources and Preparedness Activities**

---

### **3.1 Equipment, Supplies, Services, and Manpower**

Two spill kits will be provided in a storage shed at the construction site that are readily accessible by RMT personnel. (see Figure 1 in Attachment 3). Response equipment and material present at the site include:

- 50 – 15" x 20" PIG® Oil-Only Mat Pads
- 7 – 3" x 48" PIG® Skimmer Absorbent Socks
- 2 – 17" x 16" PIG® Skimmer Pillows
- 1 – 3" x 10' PIG® Skimmer Absorbent Sock
- 3 – 18" x 30" Polyethylene disposal bags w/ties
- 1 – 7" x 10" Stainless Steel Spill Kit Station Sign
- 1 – Nitrile gloves
- 1 – Safety goggles
- 1 – 7" stick PIG® Multi-Purpose Repair Putty

This material is sufficient to respond to most minor discharges occurring at the construction site and to initially contain a major discharge while waiting for additional material or support from outside contractors. The inventory is verified on a monthly basis during the scheduled facility inspection by designated personnel and is replenished as needed.

All RMT employees upon entering the site are instructed to the location of spill response equipment and staging areas, and response strategies, and with the SPCC and Oil Spill Contingency Plans for these activities. All have received training in the deployment of response material and handling of hazardous waste (HAZWOPER) and have attended the required refresher courses.

### **3.2 Access to Receiving Water Body**

The Kalamazoo River would be the first water body affected in the event of a discharge. From there, the spill would continue downstream into Lake Allegan and eventually Lake Michigan. The response strategy consists of: 1) deploying booms and other response equipment at various points/bridge crossings downstream from the plume to prevent its migration; and 2) deploying booms as a protective measure for an irrigation water intake and other downstream sensitive receptors.

### **3.3 Communications and Control**

A central coordination center will be set up at the field office in the event of a significant discharge. The field office is equipped with a variety of fixed and mobile communication equipment (telephone, fax, cell phones, two-way radios, computers) to ensure continuous communication with RMT management, responders, authorities, and other interested parties.

Communications equipment includes:

- Cell phones - Each field vehicle and the RC are provided with a cell phone. The RC and/or his alternate (Site Supervisor when the Field Operations Manager is not "on call") can be reached by cell phone 7 days a week, 24 hours a day.
- Additional equipment - Additional communications equipment will be obtained from the RMT office in Grand Rapids, Michigan, in the event that more communications equipment is necessary.

The RC is responsible for communicating the status of the response operations and for sharing relevant information with involved parties, including local, state, and federal authorities.

In the event that local response agencies, Plainwell authorities, or a federal On Site Coordinator (OSC) assumes Incident Command, the RC will function as the facility representative in the Unified Command structure.

### **3.4 Updating Procedures**

Following a response to a discharge, the RC will evaluate the actions taken and identify procedural areas where improvements are needed. The RC will conduct a briefing with field personnel, contractors, and local emergency responders to discuss lessons learned and will integrate the outcome of the discussion in subsequent health and safety briefings and employee training seminars. As necessary, the RC will amend this Contingency Plan to reflect changes made to the facility equipment and procedures.

### **3.5 Reporting Requirements**

Reporting requirements for federal and state regulations are presented in Attachment 2 with appropriate contact information and forms. In the event that reporting is required, the person reporting the discharge must provide the following information:

- Name, location, organization, and telephone number
- Name and address of the owner/operator
- Date and time of the incident
- Location of the incident
- Source and cause of discharge
- Types of material(s) discharged
- Total quantity of materials discharged



- Quantity discharged in harmful quantity (to navigable waters or adjoining shorelines)
- Danger or threat posed by the release or discharge
- Description of all affected media (*e.g.*, water, soil)
- Number and types of injuries (if any) and damage caused
- Weather conditions
- Actions used to stop, remove, and mitigate effects of the discharge
- Whether an evacuation is needed
- Name of individuals and/or organizations contacted
- Any other information that may help emergency personnel respond to the incident

Whenever the facility discharges more than 1,000 gallons of oil in a single event, or discharges more than 42 gallons of oil in each of two discharge incidents within a 12-month period, the Manager of Field Operations must provide the following information to the USEPA's Regional Administrator within 60 days:

- Name of the facility
- Name of the owner or operator
- Location of the facility
- Maximum storage or handling capacity and normal daily throughput
- Corrective actions and countermeasures taken, including a description of equipment repairs and replacements
- Description of facility, including maps, flow diagrams, and topographical maps
- Cause of the discharge(s) to navigable waters, including a failure analysis of the system and subsystems in which the failure occurred.
- Additional preventive measures taken or contemplated to minimize possibility of recurrence
- Other pertinent information requested by the Regional Administrator

# Attachment 1

## Emergency Contacts

---

### RMT, Inc. and Weyerhaeuser Operations Team

Name	Title	Telephone	Address
Jim Hutchens	RMT, Inc. Response Coordinator	(262) 879-1212 (office) (414) 687-2428 (cell)	150 N. Patrick Blvd., Suite 180 Brookfield, WI 53045-5854
Dave Pratt	RMT, Inc. Construction Superintendent	(616) 975-5415 (office) (317) 490-2874 (cell)	2025 E Beltline Avenue SE Grand Rapids, MI 49546
Kathy Huibregtse	RMT, Inc. Client Service Manager	(262) 879-1212 (office) (414) 687-2430 (cell)	150 N. Patrick Blvd., Suite 180 Brookfield, WI 53045-5854
Jennifer Hale	Weyerhaeuser Project Manager	(253) 924-3746 (office) (253) 218-5147 (cell)	Environment Health & Safety, WTC 2G2 P.O. Box 9777 Federal Way, WA 98063-9777

### Local Emergency Responders

Name	Telephone	Address
Fire/Police Department	911 (269) 685-9858	141 N. Main Street Plainwell, MI
Borgess Pipp Hospital	(269) 685-0700	411 Naomi Street Plainwell, MI 49080

# Attachment 2

## Discharge Notification Procedures

---

### Release Notification Requirements in Michigan - November 20, 2006

**Chemical releases** in Michigan are potentially reportable under one *or more* of twenty-seven different **state and federal regulations**. Determining which regulations apply to a specific release can be an overwhelming task. The “Release Notification Requirements in Michigan” table was compiled by Michigan SARA Title III Program in the Michigan Department of Environmental Quality (MDEQ) to help owners and operators of facilities in Michigan, including vehicles and farms, determine their potential notification and reporting requirements in the event of a chemical release.

Check your permits, licenses, registrations, pollution prevention plans, and local ordinances for *additional* release reporting requirements. In particular, all NPDES permits and most air permits have release reporting requirements in them that are not included on this table.

The term “**release**” means spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing. “**Chemical**” includes substances considered to be toxic or hazardous as well as substances as seemingly harmless as salad oil. The notification requirements almost always include immediate initial notification. The USEPA interprets “immediate” to mean that the notification must be made within 15 minutes after discovery of the release. This table should therefore be used as a tool to identify potential reporting requirements *before* a release occurs. The table outlines **what** releases must be reported, **when** they must be reported, and **to whom** they must be reported.

Links to the release reporting forms and chemical lists referenced in the table are available at [www.michigan.gov/deqrelease](http://www.michigan.gov/deqrelease). Visit this site for updated versions of this table, as well as updated MDEQ and LEPC contact information. For information regarding a specific regulation, contact the agency specified in the “notes” column of the table. If this is a MDEQ division, contact the *district* division office.

The USEPA published a consolidated list of chemicals subject to SARA Title III and Section 112(r) of the Clean Air Act. This document is called the “List of Lists” and is available through the MDEQ’s Release Reporting web site in three formats: as a pdf file updated October 2001, as a searchable database updated January 27, 2005, and in an Excel file updated January 27, 2005. The changes that have occurred since October 2001 are listed in the document that precedes the List of Lists in this guidebook. The “List of Lists” includes:

- CERCLA Hazardous substances with reportable quantities (RQ) for releases – 40 CFR 302, Table 302.4.

- SARA Title III Section 304 Extremely Hazardous Substances (EHS) with RQs for releases – 40 CFR 355, Appendix A.
- SARA Title III Section 313 Toxic chemicals – 40 CFR 372 Subpart D.

Written follow-up report forms that are specified in the table are required by regulation. The MDEQ has developed a generic written report form called “Spill or Release Report” (EQP 3465) that can be used to report releases of:

- CERCLA hazardous substances and extremely hazardous substances under SARA Title III,
- Hazardous waste under NREPA Part 111,
- Liquid industrial waste under NREPA Part 121,
- Hazardous substances under NREPA Part 201, and
- Polluting materials under NREPA Part 31, Part 5 Rules.

It is recommended that you also use this generic report form to record initial notifications.

After reviewing the table, you will see that if you have a release, determining if, when, and to whom a release should be reported can be complex task even if you are familiar with the table. It is therefore recommended that **if there is a release, immediately call** the following numbers even if the content or quantity of the released material has not yet been determined:

1. **911** to notify local authorities
2. **800-292-4706 (PEAS)** to notify state authorities
3. **800-424-8802 (NRC)** to notify federal authorities

You can then respond to the release, reassess the situation, and make additional notifications as required (e.g., as specified in the table or in your permits). Remember that there is **NO PENALTY FOR OVER-REPORTING!** Your follow-up report will provide details that explain why a release was or was not reportable.

General questions or comments regarding this table should be directed to the Michigan SARA Title III Program at 517-373-8481 or [deq-ead-sara@michigan.gov](mailto:deq-ead-sara@michigan.gov).

MDEQ program information is available at [www.michigan.gov/deq](http://www.michigan.gov/deq), or phone the MDEQ Environmental Assistance Center at 800-662-9278.

*Acronyms used in the table are defined at the end of the table.*

# Discharge Notification Procedures

## Release Notification Requirements in Michigan

Act & Regulation	Reporting Criteria	Initial Notification	Follow-up Report	Notes
SARA Title III Section 304 40 CFR 355.40 (EHS & Hazardous Substances)	Release of a CERCLA <b>hazardous</b> substance (40 CFR 302, Table 302.4) or <b>Extremely Hazardous Substance</b> (EHS) (40 CFR 355, Appendix A) from a facility (including motor vehicles, rolling stock, and aircraft) in a quantity equal to or greater than its corresponding reportable quantity in any 24-hr period that migrates beyond the facility boundaries. Includes continuous release reportable under CERCLA Section 103. Excludes release that is federally permitted or that results in exposure to persons solely within the boundaries of the facility. See 67 FR 18899 (4/17/02) for guidance on the CERCLA federally permitted release definition for certain air emissions. See 71 FR 58525 (10/4/06): Exemption for < 1,000 lbs of NOx released to the air from combustion or combustion-related activities. 12/27/04 phosmet was removed from the EHS list.	Immediate (within 15 minutes after discovery): to LEPC(s) of any area(s) potentially affected, and SERC (DEQ PEAS line accepts notification on behalf of SERC) by owner or operator. Continuous releases must be identified as such and are reported initially and when there is a significant change in the release. Transportation related releases can be reported to 911.	As soon as practicable (within 7 days) after release: to LEPC(s) and SERC. For continuous releases: Initial written within 30 days after initial telephone notification and follow-up within 30 days of first anniversary of initial written notification: to LEPC(s) and SERC. Michigan SARA Title III Program accepts reports on behalf of the SERC.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). Contact your LEPC for a phone number to report releases. Call 911 if your LEPC is not active. For further information, contact Michigan SARA Title III Program 517-373-8481.
CERCLA Section 103 40 CFR 302 (Hazardous Substances)	Release into the environment of a CERCLA <b>hazardous</b> substance (40 CFR 302, Table 302.4) or hazardous constituent in a mixture or solution (including hazardous waste streams) from a vessel or facility (including transport vehicles and aircraft) in a quantity equal to or greater than its corresponding reportable quantity in any 24-hour period. See 40 CFR 302.6 for notification requirements for radionuclide releases. Includes continuous release: occurs without interruption or abatement or that is routine, anticipated, and intermittent and incidental to normal operations or treatment processes. Excludes release that is federally permitted. See 67 FR 18899 (4/17/02) for guidance on the CERCLA federally permitted release definition for certain air emissions. See 71 FR 58525 (10/4/06) re Exemption for NOx releases to the air of < 1,000 lbs from combustion or combustion-related activities.	Immediate (within 15 minutes after discovery): to NRC by person in charge of vessel or offshore or onshore facility. Continuous releases must be identified as such and are reported initially and when there is a significant change in the release.	For continuous releases only: Initial written within 30 days after initial telephone notification and follow-up within 30 days of first anniversary of initial written notification: to EPA Region 5.	U.S. Coast Guard National Response Center (NRC) 800-424-8802. For further information, contact Michigan SARA Title III Program 517-373-8481 or EPA's RCRA, Superfund & EPCRA Call Center 800-424-9346.
NREPA 1994 PA 451 Part 201, Environmental Remediation	Unpermitted release into the environment over a 24-hour period of a <b>hazardous</b> substance ( <u>2001 version</u> of the CERCLA list, 40 CFR 302, Table 302.4) in a quantity equal to or greater than its corresponding reportable quantity. Does not include release solely from UST systems regulated under Part 213, and release solely from disposal area licensed under Part 115 and discovered through disposal area's hydrogeological monitoring plan. Release of substance regulated by MI Dept of Agriculture (MDA) (fertilizer, soil conditioner, or pesticide) excluding normal agricultural practices: <i>also</i> report to MDA.	Within 24 hours after discovery: to DEQ-RRD district office (PEAS after hours) by owner, operator or person holding easement interest. Report agricultural release to MDA.	Upon request: to DEQ-RRD district supervisor. Specific forms required for: "Notice Regarding Discarded or Abandoned Containers" (Form EQP4476) and "Notice of Migration of Contamination" (Form EQP4482).	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). MDA Agriculture Pollution Emergency Hotline: 800-405-0101 (from within MI) or 517-373-0440 (from outside MI). For further information, contact DEQ-RRD.

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department. This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations. Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.

Act & Regulation	Reporting Criteria	Initial Notification	Follow-up Report	Notes
NREPA 1994 PA 451 Part 83, Pesticide Control Regulation 640, Commercial Pesticide Bulk Storage (Agricultural)	Release to the environment of a commercial <b>pesticide</b> >5 gallons liquid or 100 pounds dry. The term "release" excludes normal agricultural practices. The regulation specifies that a pesticide release reportable under SARA Title III shall be reported to PEAS and the NRC.	Immediate: to PEAS* Also notify NRC for reportable spills as defined by SARA Title III & CERCLA. *MDA prefers direct notification to their hotline. PEAS forwards all agriculture calls to MDA.	Within 90 days: to MDA Environmental Stewardship Div. a revised site plan.	MDA Agriculture Pollution Emergency Hotline: 800-405-0101 (from within MI) or 517-373-0440 (from outside MI). PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). NRC: 800-424-8802 For further information, contact MDA: 517-373-1087.
NREPA 1994 PA 451 Part 85, Fertilizers Regulation 641 Commercial Fertilizer Bulk Storage Regulation 642, On Farm Fertilizer Bulk Storage (Agricultural)	Release to the environment of a commercial <b>fertilizer</b> >55 gallons liquid or 650 pounds dry; or an on farm fertilizer > 55 gallons liquid. The term "release" excludes normal agricultural practices. The term "liquid fertilizer" excludes anhydrous ammonia.	Immediate: to MDA by commercial bulk storage facility personnel (for farms, the regulation does not specify who makes the report).	Not required.	MDA Agriculture Pollution Emergency Hotline: 800-405-0101 (from within MI) or 517-373-0440 (from outside MI). For further information, contact MDA 517-373-1087.
Fire Prevention Code 1941 PA 207 Section 29.5g	A fire, explosion, spill, leak, accident, or related occurrence that involves the transportation, storage, handling, sale, use, or processing of hazardous material by a firm, person, or vehicle. <b>Hazardous</b> material = explosives, pyrotechnics, flammable gas, flammable compressed gas, flammable liquid, nonflammable compressed gas, combustible liquid, oxidizing material, poisonous gas or liquid, LPG, or irritating, etiologic, radioactive, or corrosive material. Per EO 2003-18, DLEG Bureau of Construction Codes and Fire Safety will receive reports previously sent to the State Fire Marshall.	Immediately following incident, report known details regarding incident: to DLEG Bureau of Construction Codes and Fire Safety <i>and</i> organized local fire department by owner of firm or vehicle or the person <i>and</i> the chief of first police or organized fire dept upon scene of incident.	Not required.	Contact DLEG Bureau of Construction Codes and Fire Safety: 24-hr voice mail – 517-322-5316 24-hr pager – 888-237-4081 For further information, contact local fire department.
Fire Prevention Code 1941 PA 207 Part 2 of Storage and Handling of Flammable and Combustible Liquids rules (FL/CL code)	A release from an <b>AST</b> system of >55 gal of any <b>flammable or combustible liquid</b> (flash point <200 degrees Fahrenheit) to the ground or within a secondary containment area during any 24 hour period.	As soon as practicable after detection of release: to PEAS by owner or operator.	Within 10 days after release: to DEQ (WHMD, Storage Tank Unit) outlining cause, discovery, response to prevent recurrence.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI) For further information, contact DEQ-WHMD Storage Tank Unit.

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department. This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations. Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.

Act & Regulation	Reporting Criteria	Initial Notification	Follow-up Report	Notes
49 CFR 171 (Transportation of Hazardous Materials)	Initial verbal notice: Incident during transportation (including loading, unloading, temporary storage) involving (1) <b>hazardous</b> material and resulting in death, injury requiring hospitalization, public evacuation $\geq$ 1 hour, major transportation artery or facility closure $\geq$ 1 hour, or <b>flight pattern alteration</b> ; (2) <b>fire, breakage, spillage, or suspected contamination involving radioactive material or infectious substances</b> ; (3) <b>marine pollutant</b> exceeding 450 L (119 gal) liquid or 400 kg (882 lbs) solid; (4) other per judgment of person in possession of the hazardous material (e.g., continuing danger to life exists at scene of incident). Hazardous material = CERCLA hazardous substance (40 CFR 302, Table 302.4), hazardous waste (40 CFR 262), marine pollutant (49 CFR 172.101 Appendix B), elevated temperature material, listed on Hazardous Materials Table (49 CFR 172.101), or meets criteria for hazard class/division in 49 CFR 173. Written follow-up report: Required for all of above, plus any unintentional release of hazardous material from a package (including tank); or any quantity of hazardous waste discharged during transportation; or structural damage to lading retention system, even if no release, on specification cargo tank with $\geq$ 1,000 gal capacity containing hazardous material; or undeclared hazardous material discovered.	As soon as practical but no later than 12 hours after occurrence of the incident: to NRC by each person in physical possession of the hazardous material. For infectious substances, notice may be given to the Director, Centers for Disease Control and Prevention, U.S. Public Health Service instead of NRC.	Within 30 days after discovery: to US DOT on DOT Form F 5800.1 (01-2004) "Hazardous Materials Incident Report." Report must be updated w/in 1 year of incident if: death results from injury; hazardous material or package info on prior report misidentified; damage, loss or cost not known on prior report becomes known or changes by \$25,000 or 10%. See regulation for exceptions to written report.	NRC 800-424-8802 U.S. Public Health Service 800-232-0124 For further information, contact US DOT Hazardous Materials Information Center at 800-467-4922 or online at <a href="http://hazmat.dot.gov">http://hazmat.dot.gov</a> .
NREPA 1994 PA 451 Part 31, Water Resources Protection (Release to <b>surface of ground, surface water, groundwater or public sewer system</b> )	Unpermitted release directly or indirectly to public sewer system, surface of ground, surface water or groundwater from an oil storage facility or on-land facility of a " <b>polluting material</b> " (oil, salt, or any material specified in table 1 in R 324.2009) in excess of its threshold reporting quantity during any 24-hour period. See Part 5 rules, effective 8/31/01, for details and exemptions. HB 5586 effective 6/15/04 amended the reporting requirements.	As soon as practicable after detection: to PEAS <i>and</i> 911 by owner, operator or manager. State agencies call 911 if release reported to them by another state or Canada.	Within 10 days after release: to DEQ-WB district supervisor <i>and</i> to the local health department where the release occurred, outlining cause, discovery, response and prevention of recurrence.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). For further information, contact DEQ-WB-FOD.
CWA Section 311 33 CFR 153 ( <b>Navigable waters</b> – Coast Guard/DOT) Control of Pollution by <b>Oil and Hazardous Substances</b> , Discharge Removal	Discharge of a harmful quantity of <b>oil or a hazardous substance</b> from a vessel or onshore or offshore facility into or upon navigable <b>waters</b> of the United States or adjoining <b>shorelines</b> . Harmful quantity = oil discharge that violates applicable water quality standards, or causes a film or sheen upon or discoloration of the surface of the water or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines; or a CERCLA hazardous substance (40 CFR 302, Table 302.4) in a quantity equal to or greater than its corresponding reportable quantity. Oil = oil of any kind or in any form including petroleum, crude oil, petroleum refined products, sludge, oil refuse, oil mixed with wastes, etc., as well as vegetable and animal oils.	Immediate: to NRC by person in charge of vessel or facility. If direct reporting to NRC not practicable, may report to district Coast Guard or EPA predesignated On-Scene Coordinator (OSC).	Not required.	NRC 800-424-8802 District 9 Coast Guard 216-902-6117 EPA Region 5 for predesignated OSC 312-353-2318. For further information, contact EPA Region 5 at 312-353-8200 or District 9 Coast Guard at 216-902-6054.

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department. This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations. Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.

Act & Regulation	Reporting Criteria	Initial Notification	Follow-up Report	Notes
CWA Section 311 40 CFR 110 (Discharge of Oil)	Discharges of <b>oil</b> that violate applicable <b>water</b> quality standards, or cause a film or sheen upon or discoloration of the surface of the water or adjoining <b>shorelines</b> , or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. Oil = oil of any kind or in any form including petroleum, crude oil, petroleum refined products, sludge, oil refuse, oil mixed with wastes, etc., as well as vegetable and animal oils.	Immediate: to NRC by person in charge of vessel or facility.	Not required.	NRC 800-424-8802 For further information, contact DEQ-WB-FOD.
NREPA 1994 PA 451 Part 615, Supervisor of Wells (oil and gas production fields)	A loss, spill or release of (1) any amount of <b>brine, crude oil, or oil or gas field waste</b> <i>unless</i> it is less than 42 gallons and occurs while an authorized representative is on site and is completely contained and cleaned up within 1 hour, or (2) any unpermitted amount of <b>natural gas</b> , or (3) <b>chemicals</b> used in association with oil and gas activities.	Within 8 hours after discovery of: 42 gallons or more of brine, crude oil, or oil or gas field waste, or any amount of chemical or natural gas, or; less than 42 gallons if the spill contacts surface water, groundwater, or other environmentally sensitive resources, or is not completely contained and cleaned up within 48 hours: to DEQ-OGS district office (PEAS after hours) by permittee.	Within 10 days after discovery of loss or spill: to DEQ-OGS district supervisor on Form EQP-7233 (Rev 03/99) "Report of Loss or Spill." Written report only for less than 42 gallons of brine, crude oil, or oil and gas field waste if spill does not contact surface water, groundwater, or other environmentally sensitive resources, and is completely contained and cleaned up within 48 hours.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). For further information, contact DEQ-OGS.
NREPA 1994 PA 451 Part 211, <b>Underground Storage Tanks</b> Part 213, Leaking Underground Storage Tanks	Releases of a <b>regulated substance</b> of any amount from underground storage tank (UST) systems (includes the emergency shutoff valve on down) subject to registration; overfill from UST fill pipe or vent onto ground; release from aboveground pipe attached to UST system. Regulated substance = petroleum or CERCLA hazardous substance (40 CFR 302, Table 302.4) or substance listed in CAA title I part A sect 112. Petroleum includes, but is not limited to, crude oil, motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, and petroleum solvents.	Within 24 hours after discovery (Part 211) - Includes releases discovered years after UST system removed: to DEQ-WHMD central or district office, or PEAS, or via web or fax on Form EQP 3826 (Release Report-rev. 11/2005). If free product, Form EQP 3800 (Rev 02/2003) required by UST owner or operator, or employee of owner or operator.	At 90 days on Form EQP3841 if not closed, and at 365 days on Form EQP3842 if still not closed, and at closure on Form EQP3843 (all forms Rev. 02/2003), describing response action (Part 213): to DEQ-RRD district project manager.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). On-line reporting go to DEQ Release reporting web site, select "release reporting forms" then EQP 3826. Fax for UST release: 517-335-2245. For further information, contact DEQ-WHMD or DEQ-RRD.

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department. This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations. Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.



Act & Regulation	Reporting Criteria	Initial Notification	Follow-up Report	Notes
NREPA 1994 PA 451 Part 111, <b>Hazardous Waste Management (Generators; Treatment, Storage &amp; Disposal Facilities (TSDF); Transporters)</b>	Any amount of characteristic <b>hazardous waste</b> or listed hazardous waste (as defined in R 299.9203 "Hazardous Waste Rule 203") reaches the surface water or groundwater, or A fire, explosion, or other release of hazardous waste or hazardous waste constituent occurs that could threaten human health or the environment. or A release of >1lb (or ≤1lb if not immediately cleaned up) hazardous waste to the environment from a tank system or associated secondary containment system. Additional hazardous waste reporting requirements under NREPA Part 201 and CERCLA.	Immediate: to PEAS (or for Tank systems/secondary containment, within 24 hours of discovery: to DEQ-WHMD) and to NRC if threat to human health or environment outside facility by generator, or owner or operator of TSDF, or transporter.	For large quantity generators and TSDF: Within 15 days after incident IF the contingency plan had to be implemented: to DEQ-WHMD. For tank/secondary containment systems: Within 30 days of discovery: to DEQ-WHMD. For transporters: to US DOT if required per 49 CFR 171.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). NRC 800-424-8802 NREPA Part 111 requires transporters to comply with 49 CFR 171 and 33 CFR 153. For further information, contact DEQ-WHMD.
NREPA 1994 PA 451 Part 121, <b>Liquid Industrial Waste</b>	The <b>liquid industrial waste</b> spill could threaten public health, safety, welfare, or the environment, or has reached surface water or groundwater. Liquid industrial waste includes nonhazardous brine, by-product, industrial wastewater, leachate, off-spec commercial chemical product, sludge, sanitary or storm sewer clean-out residue, grease trap clean-out residue, spill residue, used oil, or other liquid waste not regulated by other laws.	Immediate: to PEAS and local authorities by generator, transporter, or owner or operator of facility. Refer to MCL 324.12111(1) for required report elements	Prepare within 30 days after incident. Submit upon request: to DEQ-WHMD district supervisor. Refer to MCL 324.12111(1) for required report elements	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). For further information, contact DEQ-WHMD.
NREPA 1994 PA 451 Part 31, Water Resources Protection <b>(Sewer Systems)</b>	Discharge of untreated sewage or partially treated sewage from a <b>sewer system</b> onto land or into the waters of the state. "Sewer system" means a sewer system designed and used to convey sanitary sewage or storm water, or both.	Immediate (within 24 hours): to DEQ-WB district office (PEAS after hours); Local health depts.; Daily newspaper circulated in source & affected counties; & Affected municipalities.	At end of discharge: to same parties notified initially on Form EQP 5857 (Rev. 10/01) "Report of Discharges of Untreated or Partially Treated Sewage." Includes results of E. coli testing.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). For further information, contact DEQ-WB-FOD.
NREPA 1994 PA 451 Part 41, <b>Sewerage Systems</b>	Discharges of pollutants from <b>sewerage systems</b> (which can include combined sewers) in excess of those authorized by a discharge permit issued by the DEQ to surface water or groundwater as a result of a facility breakdown or emergency. Sewerage systems handle sanitary sewage or other industrial liquid wastes.	Promptly: to DEQ-WB district office (PEAS after hours) by owner.	Within 72 hours: to DEQ-WB district supervisor, outlining cause, discovery, corrective actions taken to minimize impact, restore operations, and eliminate future unpermitted discharges.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). For further information, contact DEQ-WB-FOD.
NREPA 1994 PA 451 Part 55, <b>Air Pollution Control</b>	Abnormal condition, start-up, shutdown, or malfunction that results in emissions exceeding permissible (in rule, permit or order) levels of <b>hazardous air pollutants</b> (HAPs) (CAA Sect. 112(b)) or <b>toxic air contaminants</b> (as specified in permit) for > 1 hour, or any air contaminant for > 2 hours. Written follow-up report only required for emission exceedences lasting > 2 hours.	As soon as possible, but not later than 2 business days after discovery: to DEQ-AQD district office (PEAS after hours) by owner or operator.	Within 10 days after start-up, shutdown, or abnormal condition, malfunction corrected. Or within 30 days of abnormal condition, malfunction discovery- whichever first: to DEQ-AQD district supervisor.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). For further information, contact DEQ-AQD.

NOTE: If the release is a **THREAT TO HUMAN HEALTH** or **SAFETY**, call 911 or your local fire department. This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations. Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.

Act & Regulation	Reporting Criteria	Initial Notification	Follow-up Report	Notes
49 CFR 191 Transportation of Natural and Other Gas by Pipeline	An incident, meaning: (1) Release of gas from a pipeline or of liquefied natural gas or gas from an LNG facility that results in: Death or hospitalization; or Property damage $\geq$ \$50,000. (2) Event that results in emergency shutdown of LNG facility. (3) Significant event per operator. Written Incident reports not required for LNG facilities. Applies to pipeline systems and the transportation of gas through those systems in or affecting interstate or foreign commerce. (See 49 CFR 191.3 for details.)	Earliest practicable moment following discovery: to NRC by operator.	As soon as practicable, and within 30 days after discovery: to US DOT. on DOT Form PHMSA F 7100.1 (03-04) "Incident Report – Gas Distribution System." or PHMAS F 7100.2 (01-2002) "Incident Report – Gas Transmission and Gathering Systems" Supplemental report filed as necessary as soon as practicable. Written report not required for LGN facilities.	NRC 800-424-8802 For further information go to <a href="http://ops.dot.gov">http://ops.dot.gov</a> or contact US DOT PHMSA, Office of Pipeline Safety at 202-366-4595.
49 CFR 195 Transportation of Hazardous Liquids by Pipeline	Release of hazardous liquid ( <b>petroleum, petroleum products, or anhydrous ammonia</b> ) or <b>carbon dioxide</b> from a pipeline system that results in any of the following: (a) Explosion or fire; (b) Release of $\geq 5$ gallons (except if $< 5$ barrels released due to maintenance and release not otherwise reportable, confined to property, does not pollute water, and cleaned up promptly); (c) Death of any person; (d) Injury requiring hospitalization; or (e) Property damage $>$ \$50,000. (See 49 CFR 195.50, revised 1/8/02, for details) Applies to pipeline facilities and the transportation of hazardous liquids associated with those facilities in or affecting interstate or foreign commerce. (see 49 CFR 195.1 for details.)	Earliest practicable moment following discovery: to NRC by operator If Release caused: Death or hospitalization; Fire or explosion; Property damage; Water pollution; or was Significant per the operator.	As soon as practicable, and within 30 days after discovery: to US DOT on DOT Form PHMSA F 7000-1 (01-2001) "Accident Report – Hazardous Liquid Pipeline Systems" Supplemental report must be filed within 30 days after operator receives changes or additions to original report.	NRC 800-424-8802 For further information go to <a href="http://ops.dot.gov">http://ops.dot.gov</a> or contact US DOT PHMSA, Office of Pipeline Safety at 202-366-4595.
1978 PA 368 Part 135, Radiation Control	For any emergency. Or for incident involving naturally occurring or accelerator produced <b>radioactive material</b> - Immediate notice if: Incident may have caused or threatens to cause: dose to body 25 rems, to skin 150 rems, to extremities 375 rems (per rule 247); 24 hour concentration exceeds 5000 times limits specified in table II of rules 261 to 269; contamination causes operation shut down for 1 week, or property damage $>$ \$100,000. Notice within 24 hours if: Incident may have caused or threatens to cause: dose to body 5 rems, to skin 30 rems, to extremities 75 rems (per rule 247); 24 hour concentration exceeds 500 times limits specified in table II of rules 261 to 269; contamination causes operation shut down for 1 day, or property damage $>$ \$1,000.	Immediate or within 24 hours (see reporting criteria): to DEQ-Radiological Protection Program (PEAS after hours) or MI Dept of State Police (MSP) Operations Division. by licensee or registrant.	Within 30 days after release: licensee or registrant shall submit written report to DEQ-WHMD Hazardous Waste and Radiological Protection Section. Written report also required if level of radiation or concentration of radioactive material in unrestricted area $>$ 10 times any applicable limit. See Rule 250 (R 325.5250) for required report content.	DEQ-Radiological Protection Program 517-241-1274 MSP 517-336-6100 PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). For further information, contact DEQ Radiological Protection Program.

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department. This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations. Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.

Act & Regulation	Reporting Criteria	Initial Notification	Follow-up Report	Notes
10 CFR 20 (Standards for Protection Against Radiation)	For incident involving source, by-product, or special nuclear <b>radioactive material</b> - Immediate notice if: Event that may have caused or threatens to cause: effective dose equivalent to individual 25 rems, lens dose equivalent 75 rems, shallow-dose equivalent to skin or extremities 250 rads; individual could receive 5 times annual limit on intake in 24 hours. OR Any lost, stolen, or missing licensed material in an aggregate quantity equal to or greater than 1,000 times the quantity specified in Appendix C to Part 20 under such circumstances that it appears to the licensee that an exposure could result to persons in unrestricted areas. Notice within 24 hours if: Event that may have caused or threatens to cause: an individual in 24 hours to receive effective dose equivalent >5 rems, lens dose equivalent >15 rems, shallow-dose equivalent to skin or extremities >50 rems; individual could receive >1 times annual limit on intake in 24 hours.	Immediate or within 24 hours (see reporting criteria): to USNRC by USNRC Licensee responsible for the incident.	Within 30 days of incident: licensee shall submit written report (report content specified in 10 CFR 20.2003) to USNRC. Written report also required for occurrences as specified in 10 CFR 20 Section 20.2203 and after the occurrence of any lost, stolen, or missing licensed material becomes known to the licensee, and if at the time the report is filed all licensed material in a quantity greater than 10 times the quantity specified in Appendix C to Part 20 is still missing.	US Nuclear Regulatory Commission (USNRC) 301-816-5100 For further information, contact DEQ Radiological Protection Program 517-241-1274.
1978 PA 368 Part 133, Dry Cleaning	Condition or incident presents a threat or hazard to <b>public health</b> or safety.	Immediate: to DEQ-AQD district office (PEAS after hours) by owner or operator.	Within 30 days after incident: to DEQ-AQD district supervisor.	PEAS: 800-292-4706 (from within MI) or 517-373-7660 (from outside MI). For further information, contact DEQ-AQD.
MIOSHA 1974 PA 154 Section 61, Records & Reports; Notice of Fatalities or Hospitalization	Any release that results in one <b>death</b> or the <b>hospitalization</b> of 3 or more persons.	Within 8 hours: to MIOSHA Hotline.	Not required.	MIOSHA Hotline 800-858-0397 For further information, contact DLEG-MIOSHA 517-322-1814.
TSCA 40 CFR 761.125 (PCBs)	Spills of <b>PCBs</b> at concentrations of 50 ppm or more and subject to decontamination requirements under TSCA that: contaminate surface water, sewers, drinking water supplies, grazing lands or vegetable gardens, or exceed 10 pounds. (TSCA specifies that these requirements are in addition to any under CWA or CERCLA. e.g. CERCLA requires spills of 1 pound or more to be reported to NRC.)	As soon as possible after discovery, and within 24 hours: to EPA Region 5.	Not required to be submitted. Records of cleanup and certification of decontamination shall be documented.	EPA Region 5 Toxic Program Section 312-886-6003 For further information, contact EPA Region 5
SARA Title III Section 313 40 CFR 372 (Toxic chemical release reporting)	Covered facilities as defined in 40 CFR 372 subpart B are subject to <b>toxic</b> chemical release reporting for toxic chemicals and chemical categories listed in 40 CFR 372 subpart D. On 6/30/05, methyl ethyl ketone (MEK) was removed from the list of toxic chemicals. 71 FR 32464 (6/6/06) amended 40 CFR Part 372 to include NAICS subsector and industry codes to determine covered facilities.	Not applicable.	Annually by July 1: report aggregate releases (permitted and unpermitted) to EPA and SERC on EPA's Form R "Toxic Chemical Release Inventory Reporting Form" (EPA Form 9350-1, Rev. 08/2005).	Michigan SARA Title III Program accepts reports on behalf of SERC For further information, contact Michigan SARA Title III Program 517-373-8481.

NOTE: If the release is a **THREAT TO HUMAN HEALTH or SAFETY**, call 911 or your local fire department. This table covers only those reporting requirements found in rules and regulations that apply in Michigan. Releases might be reportable under multiple regulations. Additional reporting requirements might be found in permits, licenses, registrations, contingency and pollution prevention plans, and local ordinances.

## Acronyms used in table:

AQD = Air Quality Division  
AST = Above Ground Storage Tank  
BSR = Bureau of Safety & Regulation  
CAA = Clean Air Act  
CERCLA = Comprehensive Environmental Response,  
Compensation and Liability Act of 1980  
CFR = Code of Federal Regulations  
CWA = Clean Water Act  
DEQ = Michigan Department of Environmental Quality  
DLEG = Department of Labor and Economic Growth  
DOT = Department of Transportation  
EHS = Extremely Hazardous Substance  
EO = Executive Order  
EPA = U. S. Environmental Protection Agency  
ESSD = Environmental Science & Services Division  
FL/CL = Flammable and combustible liquids

FOD = Field Operations Division  
FR = Federal Register  
HAP = Hazardous Air Pollutant  
HB = House Bill  
LEPC = Local Emergency Planning Committee  
LNG = Liquefied Natural Gas  
LPG = Liquefied Petroleum Gas  
MCL = Michigan Compiled Laws  
MDA = Michigan Department of Agriculture  
MIOSHA = Michigan Occupational Safety and Health Act  
MSP = Michigan Department of State Police  
NAICS = North American Industry Classification System  
NRC = National Response Center (U.S. Coast Guard)  
NREPA = Natural Resources & Environmental Protection Act  
OGS = Office of Geological Survey  
OPS = Office of Pipeline Safety (US DOT)  
OSC = On Scene Coordinator

PA = Public Act (Michigan)  
PCB = Polychlorinated biphenyl  
PEAS = Pollution Emergency Alerting System  
RQ = Reportable Quantity  
RRD = Remediation & Redevelopment Division  
RSPA = Research & Special Programs Administration (US DOT)  
SARA = Superfund Amendments and Reauthorization Act of 1986  
SERC = State Emergency Response Commission  
TSCA = Toxic Substance Control Act  
TSDF = Treatment, Storage & Disposal Facility  
US DOT = U.S. Department of Transportation  
USEPA = U. S. Environmental Protection Agency  
USNRC = U. S. Nuclear Regulatory Commission  
UST = Underground Storage Tank  
WB = Water Bureau  
WHMD = Waste & Hazardous Materials Division



## MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY SPILL OR RELEASE REPORT

**NOTE:** Some regulations require a specific form to use and procedures to follow when reporting a release. Those forms and procedures **MUST** be used and followed if reporting under those regulations. This report form is to aid persons reporting releases under regulations that do not require a specific form. This report form is not required to be used. To report a release, some regulations require a facility to call the PEAS Hotline at 800-292-4706, or DEQ District Office that oversees the county where it occurred, and other regulating agencies and provide the following information. A follow-up written report may be required. Keep a copy of this report as documentation that the release was reported. If you prefer to submit this report electronically by FAX or e-mail, contact the regulating agency for the correct telephone number or e-mail address. See the DEQ website on [Spill/Release Reporting](#) for more reporting information.

Please print or type all information.

<b>NAME AND TITLE OF PERSON SUBMITTING WRITTEN REPORT</b>		<b>TELEPHONE NUMBER (provide area code)</b>	
<b>NAME OF BUSINESS</b>		<b>RELEASE LOCATION (provide address if different than business, if known, and give directions to the spill location. Include nearest highway, town, road intersection, etc.)</b>	
<b>STREET ADDRESS</b>			
<b>CITY</b>	<b>STATE</b>	<b>ZIP CODE</b>	
<b>BUSINESS TELEPHONE NUMBER</b>			
<b>SITE IDENTIFICATION NUMBER AND OTHER IDENTIFYING NUMBERS (if applicable)</b>		<b>COUNTY</b>	<b>TOWNSHIP</b>
		<b>TIER/RANGE/SECTION (if known)</b>	
<b>RELEASE DATA.</b> Complete all applicable categories. Check all the boxes that apply to the release. Provide the best available information regarding the release and its impacts. Attach additional pages if necessary.			
<b>DATE &amp; TIME OF RELEASE (if known)</b> ____/____/____ ____am/pm	<b>DATE &amp; TIME OF DISCOVERY</b> ____/____/____ ____am/pm	<b>DURATION OF RELEASE (if known)</b> ____ days ____ hours ____ minutes	<b>TYPE OF INCIDENT</b> <input type="checkbox"/> Explosion <input type="checkbox"/> Fire <input type="checkbox"/> Leaking container <input type="checkbox"/> Loading/unloading release <input type="checkbox"/> Pipe/valve leak or rupture <input type="checkbox"/> Vehicle accident <input type="checkbox"/> Other _____
<b>MATERIAL RELEASED (Chemical or trade name)</b> <input type="checkbox"/> CHECK HERE IF ADDITIONAL MATERIALS LISTED ON ATTACHED PAGE.		<b>CAS NUMBER or HAZARDOUS WASTE CODE</b>	<b>ESTIMATED QUANTITY RELEASED (indicate unit e.g. lbs, gals, cu ft or yds)</b>
			<b>PHYSICAL STATE RELEASED (indicate if solid, liquid, or gas)</b>
<b>FACTORS CONTRIBUTING TO RELEASE</b> <input type="checkbox"/> Equipment failure <input type="checkbox"/> Operator error <input type="checkbox"/> Faulty process design <input type="checkbox"/> Training deficiencies <input type="checkbox"/> Unusual weather conditions <input type="checkbox"/> Other _____		<b>SOURCE OF LOSS</b> <input type="checkbox"/> Container <input type="checkbox"/> Railroad car <input type="checkbox"/> Pipeline <input type="checkbox"/> Ship <input type="checkbox"/> Tank <input type="checkbox"/> Tanker <input type="checkbox"/> Truck <input type="checkbox"/> Other _____	
<b>TYPE OF MATERIAL RELEASED</b> <input type="checkbox"/> Agricultural: manure, pesticide, <input type="checkbox"/> CERCLA Table 302.4 (40 CFR Part 302) <input type="checkbox"/> Chemicals <input type="checkbox"/> Flammable or combustible liquid <input type="checkbox"/> Hazardous waste <input type="checkbox"/> Liquid industrial waste <input type="checkbox"/> Oil/petroleum products or waste <input type="checkbox"/> Salt <input type="checkbox"/> Sewage <input type="checkbox"/> Other _____ <input type="checkbox"/> Unknown	<b>MATERIAL LISTED ON or DEFINED BY</b> <input type="checkbox"/> CAA Section 112(r) list (40 CFR Part 68) fertilizer <input type="checkbox"/> EPCRA Extremely Hazardous Substance (40 CFR Part 355) <input type="checkbox"/> Michigan Critical Materials Register or permit <input type="checkbox"/> NREPA Part 31, Part 5 Rules polluting material <input type="checkbox"/> NREPA Part 111 or RCRA hazardous waste <input type="checkbox"/> NREPA Part 121 liquid industrial waste <input type="checkbox"/> Other list _____ <input type="checkbox"/> Unknown		
<b>IMMEDIATE ACTIONS TAKEN</b> <input type="checkbox"/> Containment <input type="checkbox"/> Dilution <input type="checkbox"/> Evacuation <input type="checkbox"/> Hazard removal <input type="checkbox"/> Neutralization <input type="checkbox"/> System shut down <input type="checkbox"/> Diversion of release to treatment <input type="checkbox"/> Decontamination of persons or equipment <input type="checkbox"/> Monitoring <input type="checkbox"/> Other _____			
<b>RELEASE REACHED</b> <input type="checkbox"/> Surface waters (include name of river, lake, drain involved) _____ Distance from spill location to surface water, in feet _____ <input type="checkbox"/> Drain connected to sanitary sewer (include name of wastewater treatment plant and/or street drain, if known) _____ <input type="checkbox"/> Drain connected to storm sewer (include name of drain or water body it discharges into, if known) _____ <input type="checkbox"/> Groundwater (indicate if it is a known or suspected drinking water source and include name of aquifer, if known) _____ <input type="checkbox"/> Soils (include type e.g. clay, sand, loam, etc.) _____ <input type="checkbox"/> Ambient Air <input type="checkbox"/> Spill contained on impervious surface			

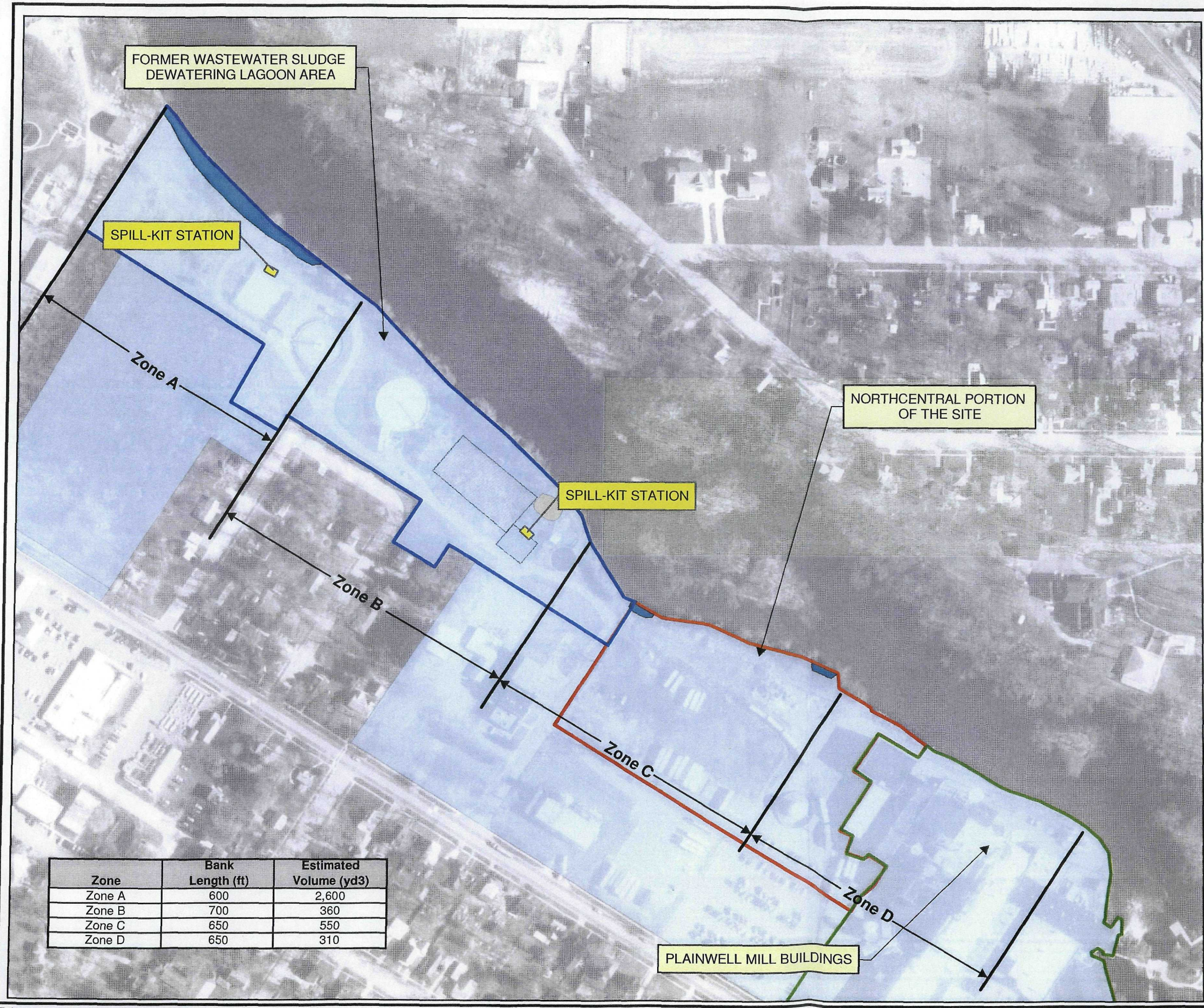
<b>EXTENT OF INJURIES, IF ANY</b>   	<b>WAS ANYONE HOSPITALIZED?</b> <input type="checkbox"/> Yes <b>NUMBER HOSPITALIZED:</b> <input type="checkbox"/> No	<b>TOTAL NUMBER OF INJURIES TREATED ON-SITE:</b>  																																																									
<b>DESCRIBE THE INCIDENT, THE TYPE OF EQUIPMENT INVOLVED IN THE RELEASE, HOW THE VOLUME OF LOSS WAS DETERMINED, ALONG WITH ANY RESULTING ENVIRONMENTAL DAMAGE CAUSED BY THE RELEASE. IDENTIFY WHO IMMEDIATELY RESPONDED TO THE INCIDENT (own employees or contractor — include cleanup company name, contact person, and telephone number). ALSO IDENTIFY WHO DID FURTHER CLEANUP ACTIVITIES, IF PERFORMED OR KNOWN WHEN REPORT SUBMITTED</b> <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE   																																																											
<b>ESTIMATED QUANTITY OF ANY RECOVERED MATERIALS AND A DESCRIPTION OF HOW THOSE MATERIALS WERE MANAGED (include disposal method if applicable)</b> <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE  																																																											
<b>ASSESSMENT OF ACTUAL OR POTENTIAL HAZARDS TO HUMAN HEALTH (include known acute or immediate and chronic or delayed effects, and where appropriate, advice regarding medical attention necessary for exposed individuals.)</b> <input type="checkbox"/> CHECK HERE IF DESCRIPTION OR ADDITIONAL COMMENTS ARE INCLUDED ON ATTACHED PAGE  																																																											
<b>MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY NOTIFIED:</b> <b>INITIAL CONTACT BY:</b> <input type="checkbox"/> Telephone <input type="checkbox"/> Fax <input type="checkbox"/> Email <input type="checkbox"/> Other <b>DATE/TIME INITIAL CONTACT:</b> _____ <input type="checkbox"/> PEAS: 800-292-4706 Log Number Assigned _____ <input type="checkbox"/> DEQ District or Field Office Divisions or Offices Contacted: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Baraga <input type="checkbox"/> Gwinn <input type="checkbox"/> Air Quality  <input type="checkbox"/> Bay City <input type="checkbox"/> Jackson <input type="checkbox"/> Land &amp; Water Management  <input type="checkbox"/> Cadillac <input type="checkbox"/> Kalamazoo <input type="checkbox"/> Office Geological Survey  <input type="checkbox"/> Crystal Falls <input type="checkbox"/> Lansing <input type="checkbox"/> Remediation and  <input type="checkbox"/> Detroit <input type="checkbox"/> Newberry Redevelopment  <input type="checkbox"/> Gaylord <input type="checkbox"/> Warren <input type="checkbox"/> Waste and Hazardous  <input type="checkbox"/> Grand Rapids <input type="checkbox"/> Wyoming Materials  </div> <div style="width: 50%;"> DEQ Office locations are subject to change <input type="checkbox"/> Water Bureau </div> </div> <b>NAME AND TITLE OF PERSON MAKING INITIAL REPORT:</b>    <b>DEQ STAFF CONTACTED &amp; PHONE NUMBER:</b>  	<b>OTHER ENTITIES NOTIFIED:</b> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">Date:</th> <th style="width: 10%; text-align: center;">Time:</th> </tr> </thead> <tbody> <tr><td><input type="checkbox"/> National Response Center (NRC): 800-424-8802</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> US Coast Guard Office:</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Detroit <input type="checkbox"/> Grand Haven <input type="checkbox"/> Sault Ste. Marie</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> US Department of Transportation</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> US Environmental Protection Agency</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> 911 (or primary public safety answering point)</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Local Fire Department</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Local Police and/or State Police</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Local Emergency Planning Committee</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> State Emergency Response Commission</td><td>_____</td><td>_____</td></tr> <tr><td>via MI SARA Title III Program</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Wastewater Treatment Plant Authority</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Hazmat Team</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Local Health Department</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Department of Labor &amp; Economic Growth MIOSHA</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Department of Labor &amp; Economic Growth Fire Safety</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Michigan Department of Agriculture: 800-405-0101</td><td>_____</td><td>_____</td></tr> <tr><td><input type="checkbox"/> Other _____</td><td>_____</td><td>_____</td></tr> </tbody> </table> <b>PERSON CONTACTED &amp; PHONE NUMBER:</b>  			Date:	Time:	<input type="checkbox"/> National Response Center (NRC): 800-424-8802	_____	_____	<input type="checkbox"/> US Coast Guard Office:	_____	_____	<input type="checkbox"/> Detroit <input type="checkbox"/> Grand Haven <input type="checkbox"/> Sault Ste. Marie	_____	_____	<input type="checkbox"/> US Department of Transportation	_____	_____	<input type="checkbox"/> US Environmental Protection Agency	_____	_____	<input type="checkbox"/> 911 (or primary public safety answering point)	_____	_____	<input type="checkbox"/> Local Fire Department	_____	_____	<input type="checkbox"/> Local Police and/or State Police	_____	_____	<input type="checkbox"/> Local Emergency Planning Committee	_____	_____	<input type="checkbox"/> State Emergency Response Commission	_____	_____	via MI SARA Title III Program	_____	_____	<input type="checkbox"/> Wastewater Treatment Plant Authority	_____	_____	<input type="checkbox"/> Hazmat Team	_____	_____	<input type="checkbox"/> Local Health Department	_____	_____	<input type="checkbox"/> Department of Labor & Economic Growth MIOSHA	_____	_____	<input type="checkbox"/> Department of Labor & Economic Growth Fire Safety	_____	_____	<input type="checkbox"/> Michigan Department of Agriculture: 800-405-0101	_____	_____	<input type="checkbox"/> Other _____	_____	_____
	Date:	Time:																																																									
<input type="checkbox"/> National Response Center (NRC): 800-424-8802	_____	_____																																																									
<input type="checkbox"/> US Coast Guard Office:	_____	_____																																																									
<input type="checkbox"/> Detroit <input type="checkbox"/> Grand Haven <input type="checkbox"/> Sault Ste. Marie	_____	_____																																																									
<input type="checkbox"/> US Department of Transportation	_____	_____																																																									
<input type="checkbox"/> US Environmental Protection Agency	_____	_____																																																									
<input type="checkbox"/> 911 (or primary public safety answering point)	_____	_____																																																									
<input type="checkbox"/> Local Fire Department	_____	_____																																																									
<input type="checkbox"/> Local Police and/or State Police	_____	_____																																																									
<input type="checkbox"/> Local Emergency Planning Committee	_____	_____																																																									
<input type="checkbox"/> State Emergency Response Commission	_____	_____																																																									
via MI SARA Title III Program	_____	_____																																																									
<input type="checkbox"/> Wastewater Treatment Plant Authority	_____	_____																																																									
<input type="checkbox"/> Hazmat Team	_____	_____																																																									
<input type="checkbox"/> Local Health Department	_____	_____																																																									
<input type="checkbox"/> Department of Labor & Economic Growth MIOSHA	_____	_____																																																									
<input type="checkbox"/> Department of Labor & Economic Growth Fire Safety	_____	_____																																																									
<input type="checkbox"/> Michigan Department of Agriculture: 800-405-0101	_____	_____																																																									
<input type="checkbox"/> Other _____	_____	_____																																																									
<b>DATE WRITTEN REPORT SUBMITTED</b>	<b>SIGNATURE OF PERSON SUBMITTING WRITTEN REPORT</b>																																																										

# Attachment 3

## Figure

---





Zone	Bank Length (ft)	Estimated Volume (yd3)
Zone A	600	2,600
Zone B	700	360
Zone C	650	550
Zone D	650	310

### LEGEND

- FORMER DEWATERING LAGOON AREA
- NORTHCENTRAL PORTION OF THE SITE
- PLAINWELL MILL BUILDINGS AREA
- PROPERTY LIMITS
- FLOODPLAIN AREAS

### SEDIMENT AND WATER TREATMENT AREAS

- EXCESS MATERIAL STOCKPILE
- SEDIMENT DEWATERING AREA
- WASTE WATER TREATMENT AREA

### NOTES

1. Due to the work moving along the bank the Spill-Kit Station locations noted on the figure are approximate and field staff will notify the Response Coordinator of any changes to this layout.

PROJECT: WEYERHAEUSER COMPANY KALAMAZOO RIVER SUPERFUND SITE			
SHEET TITLE: PLAINWELL MILL PROPERTY AND RIVERBANK EARTHWORK AREA LIMITS			
DRAWN BY: PYLKASE	SCALE: AS NOTED	PROJ. NO.: 00-05130.03	
CHECKED BY:		FILE NO.: 51300305	
APPROVED BY:	DATE PRINTED: 10/8/2007	<b>FIGURE 1</b>	
DATE: OCTOBER 2007			

150 N. Patrick Blvd., Suite 180  
Brookfield, WI 53045-5854  
Phone: 262-879-1212  
Fax: 262-879-1220



# Appendix E

## Air Monitoring Plan

---

## **Air Monitoring**

Air monitoring will be conducted to assist in the selection of respiratory protection if visible persistent dust is present in the breathing zone of on site workers. The potential respiratory concern for activities at the former Plainwell Mill property is possible airborne particulate matter generation from soil removal and surface grading and reshaping. Surface and subsurface materials contain PCBs. Preventative measures such as dust-suppression water application shall be used to reduce potential airborne contamination. Excavation of saturated materials, cold temperatures, vegetation, and gravel present at the site should also assist in limiting airborne particulate matter generation.

### **Exposure Limit/Action Level**

The constituents of concern at the site are general dust (particulates not otherwise regulated) and PCB contaminated particulates. The OSHA PEL for particulates not otherwise regulated and PCBs (54% chlorine) is TWA 15 mg/m<sup>3</sup> (total dust) and TWA 0.5 mg/m<sup>3</sup>, respectively. Based on the PEL for PCB (54% chlorine) and the maximum concentration found on site, the site-specific exposure level for PCBs is TWA 3,165 mg/m<sup>3</sup>. The real-time exposure calculation is provided below. Units of RTE are mg/m<sup>3</sup>. The units of PEL are mg/m<sup>3</sup>. The units of COC concentration are mg/kg:

$$RTE = \frac{PEL \text{ for PCB}}{\text{Safety Factor of 2}} \times \frac{1,000,000}{COC \text{ concentration}}$$

Details of the calculation are provided on the next page.

By applying a safety factor of two, the action level for nuisance dust will be TWA 7.5 mg/m<sup>3</sup>. Therefore, based on this analysis, the action level for the site work will be TWA 7.5 mg/m<sup>3</sup> total dust as this is the lowest exposure level for the constituents of concern.

### **Monitor Calibration**

Air monitoring will be conducted using a real-time aerosol monitor (MiniRAM). The MiniRAM will be calibrated and maintained per manufacturer's recommendations (copies of the instrument manual will be kept on site). Daily field calibration results will be recorded in the field notebook.

### **Monitoring Procedure**

Monitoring will occur based on field conditions such as periods of visible dust generation for more than fifteen minutes or as determined by the HSR. The sampler will take mini ram readings down-wind of site activities, where the highest exposure is expected, and in other locations as dictated by site conditions. Upwind samples will be obtained to determine a background airborne particulate concentration.

### **Response to Monitoring Results**

Should readings indicate dust concentrations greater than TWA 7.5 mg/m<sup>3</sup> airborne dust, protection levels will be examined and additional/more frequent administrative controls (e.g., wetting down the work area)

will be applied prior to upgrading PPE to dust respirators. Based on the outdoor setting, moist soil conditions, cold weather, vegetation, and gravel present at the site, nuisance dust is not expected to exist at a level that will warrant upgrading employee respiratory protection. However, if such conditions are encountered, appropriate respiratory protection will be provided as necessary. Once airborne particulate levels fall to less than TWA 7.5 mg/m<sup>3</sup>, level changes (if utilized) may be downgraded upon approval from the site HSR.

**Recordkeeping**

Air monitoring readings will be maintained in the field by the HSR. The HSR will record results in the field log books with the names of personnel working in the area, date, time, location, task being conducted, concentration levels, and any observations noted.



Real - Time Exposure Calculation  
for particulates

Site Name: Former Plainwell  
Job Number: Mill Banks Prepared by: KKG  
5130.03 Checked by: \_\_\_\_\_

Constituent: PCBs

OSHA PEL  
or ACGIH TLV: 0.5 mg/m<sup>3</sup>  
(whichever is LESS)

Safety Factor: 2 Need approval from HS Coordinator  
to use a safety factor less than 2.

Maximum Concentration  
detected at site: 79 mg/kg

If SF is 2 then need less than 0.2500 mg/m<sup>3</sup> PCBs in air.

Action Levels for PCBs

3,164.557 mg particulates/m<sup>3</sup> air is action level for Level C upgrade at this site for: PCBs  
(PEL or TLV / SF in mg/m<sup>3</sup>) \* (1,000,000 mg soil/ max concentration in mg)

If applicable:

Enter the LOWEST of the STEL, ceiling, or IDLH: 5 mg/m<sup>3</sup>

If SF is 2 then need to be less than 31,645.6 mg/m<sup>3</sup> particulates in ai  
For evacuation or Level B upgrade at this site for: PCBs  
(STEL, ceiling or IDLH / SF in mg/m<sup>3</sup>) \* (1,000,000 / max concentration in mg)

SUMMARY FOR PCBs

Level C upgrade level: 3,164.557 mg/m<sup>3</sup> particulates  
Level B upgrade or evacuation level: 31,645.6 mg/m<sup>3</sup> particulates

# Appendix F

## **RMT Project/Field Safety Audit Form**

---

## RMT Project/Field Safety Audit Form

Project Name: \_\_\_\_\_

Office Location: \_\_\_\_\_

Project Number: \_\_\_\_\_

Date of Audit: \_\_\_\_\_

General		Yes	No	N/A	Corrective Action Notes
1	For RMT projects with temporary offices, are OSHA and job-site warning posters posted and are job-site injury records kept?				
2	Are all RMT personnel current on training requirements (i.e., 40-Hour HAZWOPER, 8-Hour Refresher)?				
3	Is training documentation for RMT employees available on site?				
4	Are appropriate RMT personnel current with medical surveillance protocol?				
5	Is at least one RMT employee on site currently trained in CPR and First Aid?				
6	Is there a stocked first aid kit located near/in job trailers?				
7	Are all containers labeled to clearly identify their contents?				
8	Are hot work zones established for hazardous waste operation and enforced?				
9	Are compressed gas cylinders being used on site properly secured?				
10	Are daily, pre-work safety meetings being held?				
RMT Subcontractors					
11	Were subcontractors qualified for the project by using RMT's subcontractor H&S Qualification form?				
12	Are subcontractors using appropriate personal protective equipment to protect their employees?				
13	Have all non-RMT employees on site been informed as to possible hazards?				
14	Does the subcontractor have a stocked first aid kit in their job trailer?				
RMT H&S Plan					
15	Has the H&S plan been reviewed and signed by all on-site RMT personnel?				
16	Are H&S procedures listed in the RMT H&S plan being followed by RMT personnel?				
17	Does the RMT H&S plan address all apparent hazards at this site?				
18	Is the RMT H&S plan specific to the Project operations/RMT project responsibilities?				
19	Is appropriate PPE identified on the RMT H&S plan?				
20	Is the PPE being utilized by RMT personnel as directed in the H&S plan?				
21	Are medical facilities identified on the RMT H&S plan?				

Check Yes, No or N/A for each item

For all non-compliant responses, enter description and  
corrective action(s) on notes page

## RMT Project/Field Safety Audit Form

Project Name: \_\_\_\_\_  
Project Number: \_\_\_\_\_

Office Location: \_\_\_\_\_  
Date of Audit: \_\_\_\_\_

	Hazard Communication	Yes	No	N/A	Corrective Action Notes
22	Are MSDSs for RMT-supplied materials available?				
23	Are MSDS for subcontractor-supplied materials available?				
24	Have employees received hazard communication training?				
25	Are hazardous substances clearly marked?				
26	Is there an Emergency Response Plan in place in case of unintentional release (i.e., spill kit)?				
	Fire Protection/Prevention				
27	Is fire-fighting equipment available and in proper working condition?				
28	Have RMT personnel been trained in use of fire-fighting equipment?				
29	Are "no smoking" signs posted in appropriate locations?				
	Electrical/Power Tools				
30	Are electrical dangers posted?				
31	Are ground fault circuit interrupters used?				
32	Are terminal/disconnect/breaker dead front boxes equipped with covers?				
33	Have known underground/overhead utilities been identified and clearly marked?				
34	Are power tools properly grounded or double insulated?				
35	Are mechanical ties and guards in use with power tools?				
36	Is there an appropriate Lockout/Tagout (LOTO) procedure in place?				
	Ladders				
37	Are ladders inspected and properly maintained (e.g., not painted)?				
38	Are ladders properly secured to prevent slipping, sliding, or falling?				
39	Do side rails extend 36 inches above the top of the landing?				
40	Are stepladders fully open when in use?				
41	Are metal ladders being used around electrical equipment?				

Check Yes, No or N/A for each item

For all non-compliant responses, enter description and  
corrective action(s) on notes page

## RMT Project/Field Safety Audit Form

Project Name: \_\_\_\_\_  
Project Number: \_\_\_\_\_

Office Location: \_\_\_\_\_  
Date of Audit: \_\_\_\_\_

	Scaffolding	Yes	No	N/A	Corrective Action Notes
42	Have employees received training in proper scaffold use?				
43	Is there a competent person on site?				
44	Are all connections secure and scaffold equipment in good working order?				
45	Is scaffold tied into structure when it exceeds 4 times the base width of the scaffold?				
46	Are working areas free of debris, snow, grease, ice?				
47	Are workers protected from falling objects?				
48	Is the scaffold plumb and square with cross-bracing?				
49	Are guard rails, intermediate rails, toe-boards, and end rails in place for scaffolds over 10 ft.?				
	<b>Manholes and Permit-Required Confined Space Entry</b>				
50	Has access and egress been provided?				
51	Has an entry permit been obtained?				
52	Have hazards been properly identified?				
53	Is air monitoring equipment on site, appropriate, calibrated, and in use?				
54	Are areas being ventilated before entry and during occupation?				
55	Have entrant, attendant, and rescue personnel been identified?				
56	Is proper rescue equipment on site? Inspected?				
57	Is appropriate lighting provided?				
	<b>Motorized Vehicles</b>				
58	Have operators received training?				
59	Are brakes, lights, horn, seat belts, backup lights or warning signals intact and functioning?				
60	Are personnel carried in a safe manner?				
61	Are fire extinguishers carried, if appropriate?				

Check Yes, No or N/A for each item

For all non-compliant responses, enter description and  
corrective action(s) on notes page



## RMT Project/Field Safety Audit Form

Project Name: \_\_\_\_\_

Office Location: \_\_\_\_\_

Project Number: \_\_\_\_\_

Date of Audit: \_\_\_\_\_

Excavations		Yes	No	N/A	Corrective Action Notes
62	Are excavations inspected daily?				
63	Is there any excavation entry by RMT staff?				
64	Is the competent person overseeing the trenching excavation work on site?				
65	Is shoring, sloping or benching appropriate?				
66	Is access and egress provided for employees working in excavations of 4 feet or greater in depth?				
67	Are materials stored within 2 feet of the excavation?				
68	Is the excavation barricaded?				
69	Have soils been classified (if sloping and benching is used as the protective system for employees)?				
	<b>Water Safety</b>				
70	Are watercraft inspected before use for leaks, damage, etc.?				
71	Is necessary emergency gear (life jackets or rings, fire extinguishers, flares, etc.) available?				
72	Are employees trained on proper safety protocols involving wading and walking in water?				
73	Are employees using the "buddy system" when taking samples in water?				
	<b>Other Items</b>				
74					
75					
76					
77					
78					
80					

HSC Signature: \_\_\_\_\_

Date: \_\_\_\_\_

PM Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Check Yes, No or N/A for each item

For all non-compliant responses, enter description and  
corrective action(s) on notes page

[illegible]

## Notes Page

[illegible]

Date:

Date: \_\_\_\_\_

# Appendix G

## Daily Safety Meeting Sign-In Form

---

# Daily Safety Meeting Sign-in

## Daily Hazard Review Topic:

Briars or Thistles  
Chain Saws  
Cold Stress  
Cutting Tools  
Dust/Particulates (PNOR)(Particulates Not Otherwise Regulated)  
(OSHA PEL = 15 mg./m3, total)  
(OSHA PEL = 5 mg./m3, respirable)  
Evening Work  
Field Equipment  
Field Vehicle  
Flying Debris/ Eye Injuries  
Hand Tools  
Heat Stress  
Heavy Equipment  
Heavy Lifting  
Housekeeping  
Insects (ticks, bees, spiders, etc.)  
Irate Neighbors  
Long Hours/Fatigue  
Material Handling  
Noise  
Overhead Hazards  
Poisonous Plants  
Power Washing Equipment  
Sample Preservative Chemicals  
Severe Weather  
Sharp Objects  
Slippery Ground/Surfaces  
Slips, Trips, and Falls:  
Steep Slopes or Banks  
Sunburn  
Surface Water  
Terrain

## Daily Safety Meeting Sign-in

Traffic (client, contractors, public, semi-trucks, forklifts, etc.)

Tree Cutting

Trip Hazards (wires, cords, hoses, debris, corn stubble, uneven surfaces, etc.)

Uneven Surfaces

Utilities – Overhead (electrical, telephone, cable TV, etc.)

Utilities – Underground (electric, gas, telephone, water, storm sewer, sanitary sewer, cable TV, etc.).

### Acknowledgment Statement:

As an affected employee of RMT, Inc., I hereby acknowledge that I have reviewed the contents of this site-specific HSP and the **daily safety meeting topic**, and that I will use the applicable personal protective equipment (PPE) and follow the procedures specified in the HSP.

### Signatures of all onsite RMT Personnel, including Direct-Hires (Required):

_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____
_____	Date: _____